

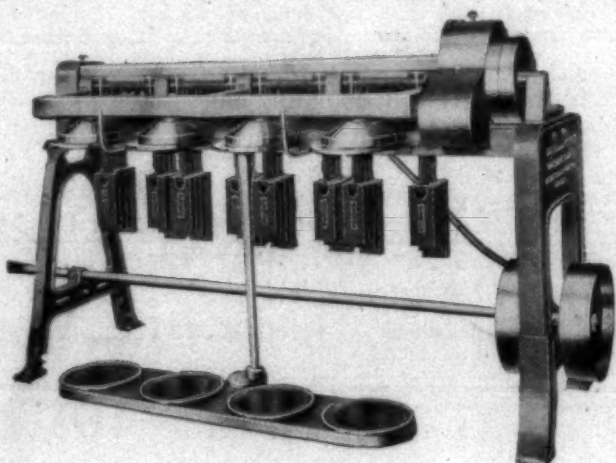
SOUTHERN TEXTILE BULLETIN

VOL. XII

CHARLOTTE, N. C., SEPTEMBER 21, 1916

NUMBER 4

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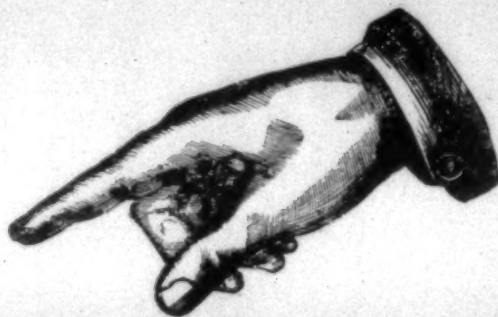
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SOUTHERN TEXTILE BULLETIN

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EFFECTIVE MILL VENTILATION

Harry L. Van Zile Before National Association of Cotton Manufacturers

The ventilation of mills is a subject that has received much consideration from mill owners, managers and architects, but no method seems to be universally satisfactory.

The reasons for the apparent diversity of opinions on this matter are many. Mills, broadly speaking, cover many kinds of buildings devoted to manufacturing an infinite variety of goods and articles. Therefore, these buildings vary greatly in floor space, cubic contents per operative, and also in relative number and size of windows for a given floor area. In fact, in the same mill the propositions of space, air and light vary greatly in the different rooms.

Laws have been put on the statute books in many states giving the minimum amount of floor area and cubic feet of space to be allowed for each employee, but it is rare indeed in actual practice to find the air space restricted to these minimum quantities.

The mere fact, however, that these minimum requirements have been stated, may have created the impression in the mind of a mill manager that when each operative in his mill has such a liberal amount of space at his disposal the matter of ventilation will take care of itself. In fact, I have heard it argued that because there were so few people in some of the working rooms it was not necessary to admit fresh air; but in fact the amount of fresh air which must be supplied each hour, for the best results to health, and consequently the most efficient operation, is dependent on the number of employees, and the size of the room has little to do with it.

To illustrate this, let us assume a room with the operatives closely placed, or, say 500 cubic feet per occupant, which is well above the minimum required in many states. For one hundred operatives this room would contain 50,000 cubic feet.

The practice adopted in most ventilating computations is to allow 2,000 cubic feet of fresh air per hour per occupant. This shows that this room should have 200,000 cubic feet of fresh air admitted to it each hour, or, theoretically, a complete change every fifteen minutes. The total amount of fresh air admitted in a ten-hour working day would be 2,000,000 cubic feet and it

will be evident that the size of the room is of relatively small importance.

If the room started in the morning filled with 50,000 cubic feet of fresh air, the amount to be supplied during the day would be 1,950,000 cubic feet. If the room was four times as big, or containing 200,000 cubic feet, the amount to be supplied during the day would be 1,800,000 cubic feet, or only about 8 per cent less.

In considering these figures and carrying the computation to its logical result, managers of mills and factories may be fearful of the amount of coal which will have to be supplied to increase the temperature of the incoming air during the colder months so that the mill will not be too cold. A few figures dealing with this aspect of the problem may, therefore, be interesting.

A pound of good bituminous coal contains about 13,500 British Thermal Units (B. T. U.), and if burned under a modern boiler 70 per cent efficiency may be obtained, or 9,450 B. T. U. from each pound of coal may be available for heating purposes. One B. T. U. will raise a cubic foot of air 56 degrees Fahrenheit. If the incoming air during a few bitter days in winter is zero degrees and the desired temperature of the mill is 65 degrees, each cubic foot of entering air would require 1.2 B. T. U. to heat it to 65 degrees Fahrenheit. A fair assumption, however, for the winter months in the northern states is that the average temperature of the incoming air will be 20 degrees, or about 8-10 of a B. T. U. will be required to raise a cubic foot of it to 65 degrees Fahrenheit. For 2,000 cubic feet per person this shows that 1,600 B. T. U. is required per hour. A human being gives off 400 B. T. U. per hour and the remaining 1,200 B. T. U. must be furnished by the heating system. One pound of coal would, therefore, probably heat sufficient air for eight persons.

Operating machinery due to the friction of the moving parts, belts, etc., continually gives off heat, so the deficiency to be supplied by the heating system varies in various mills, but is much less than is usually supposed to be necessary. Owing, however, to faulty design of windows, lack of care in keeping doors, elevator shafts and other

openings closed, much heat is wasted that should be utilized to heat the incoming fresh air. It will be seen, therefore, that the problem of heating fresh air, while solved by a common principle, is a peculiar problem for each mill; but there are still some general characteristics worthy of further consideration.

Some of the radiation from the windows can be eliminated by the proper method of admitting fresh air, and if the air, whether fresh or stale and partly exhausted of its oxygen, is kept circulating in the room so that the temperature is the same at the floor and ceiling, operatives are more comfortable at a lower average temperature than if their feet are cold and their heads hot.

Mechanical ventilation, involving, as it does, the use of expensive mechanical apparatus with ducts of large size and a continual upkeep and operating cost, has proven disappointing in most cases where it has been installed. Hospitals, schools and public buildings, for instance, have been equipped with elaborate systems of mechanical ventilation, the cost of which would be prohibitive if interest on such investments was to be counted in and earned, as would be necessary in a manufacturing establishment.

It is possible, however, in many mills, to utilize the windows to admit the necessary fresh air. This is most readily accomplished when the windows are of the lift or double hung type, and the heating pipes or radiators are of sufficient capacity and are laced under the windows.

Everyone realizes the fact that windows will, if open, admit the outside air, but as ordinarily done it is unsatisfactory in its working and the draughts and cold zones produced in this way make it impossible to utilize satisfactorily this method of obtaining the necessary outside air. Nevertheless, the capacity of an open window for delivering air to a room is relatively great and, as it costs nothing for operation, the use of such a means is desirable if the wind currents can be properly introduced and directed.

Returning to our assumed room of 50,000 cubic feet capacity, or, say 50 x 100 feet with a 10-foot ceiling, let us assume ten 4-foot windows on each 100-foot side, or 40 feet of window length. If the air was admitted on one side and expelled on

the opposite side the rate of delivery would have to be 5,000 cubic feet per foot of window length for a total of 200,000 cubic feet per hour. With air entering at the slow speed of three miles per hour and traveling across the room, the delivery of the required quantity would be obtained if the windows were raised slightly over 3 inches. As air is always in motion and the records for the eastern states show that the average yearly speed is twelve miles per hour or over, the calculations based on a speed of three miles per hour are conservative.

If the room has windows on one side only, and there are no windows or other openings for the vitiated air to pass out, a different situation is presented, but it is still altogether possible to admit the requisite amount of fresh air and also to expel the vitiated air through the window openings. This might be called making the room breathe. The air then pours into the room at a rate dependent on the speed of the outside wind until such time as the pressure of the air in the room is such that no further air can enter notwithstanding the outside wind pressure. The room is then virtually an air-cushion. Wind speed is always variable, constantly increasing and decreasing, and when a lull occurs in the rate of wind movement the air pressure within the room exceeds the outside wind pressure, and at this moment the current reverses itself and air passes out through the same window openings that shortly before admitted the wind. This action is easily shown by an anemometer, many experiments with which indicate that the quantity of the reverse current is, roughly, 60 per cent of the quantity of the incoming current, the difference or 40 per cent, being due to leakage under the doors and other small openings. This is not a mere abstract theory, but is confirmed by the actual results which I have obtained after experiments in rooms of many forms and sizes. It will be noted that thus far I have been speaking of ventilation without mechanical apparatus, through open windows by simple reliance upon the never ceasing air movement due to even slight changes in wind pressure.

The practical difficulty, however, in using mere open windows in the

(Continued on Page 6.)

SIGNIFICANCE OF FIRE WASTE

Chas. E. Meek Before National Association of Cotton Manufacturers

Many years ago, someone said to me that cotton from the standpoint of its importance as a product of our soil was the worst abused of all agricultural commodities. Having this in mind, I naturally began to make observations during my frequent trips through the cotton belt, and before long was convinced that the statement was extremely mild. Take, for instance, a day's journey over any of the Southern railroads during the cotton-moving season and you will see hundreds of bales of cotton dumped everywhere. The fire hazard is plainly evident, and frequently the charred remnants of bales bear mute testimony to the crime of American carelessness. What kind of reasoning is used in exposing baled cotton to the mercies of a locomotive spitting out red hot coals, or as a resting place for a tired nigger who is certain to drop off to sleep with a lighted pipe in his mouth, is beyond analysis. Then there is the cigarette and match hazard, the finest combination on earth for starting a bale of cotton on the road to destruction. The country boy winds up his daily pilgrimage to the depot with a soft seat on a bale of cotton and burns up a few cigarettes while waiting for the train to get in. The bale burns up later.

Think of the great hazard created at the cotton shipping ports during the height of the season, when thousands of bales are unprotected. This is also true of interior points. In March of this year, Augusta, Ga., was swept by fire, and while cotton was not the principal cause, it can be charged with being an accessory, for the streets of the city were choked with bales, and hydrants were even blocked by it. It requires more mental gymnastics than I am capable of to figure out why such conditions should continue.

Cotton is probably the collateral behind more loans than any other product of our soil. The planter borrows money to buy seed, fertilizer and labor; the storekeeper borrows money to pay for goods he supplies to the planter; the local bank borrows money from its correspondents to lend the planter and the storekeeper; and the correspondents, in turn, borrow from the banks in the larger cities. When the crop has been harvested, the cotton buyer borrows money to pay for his purchases, and then there begins another chain of borrowings which ends only when you borrow to pay for your cotton purchases. The converting of the raw material into a manufactured article starts a new series of borrowing transactions, which doesn't end until the ultimate consumer is reached, and even he sometimes is compelled to touch a friend in order to purchase a shirt.

Therefore, I claim that cotton, as a great factor of credit, is entitled to more respect than it has been receiving. Of course there is the protection against money loss in these transactions through fire insurance, but it is impossible to replace the

economic waste, which, in the last analysis, means more than the mere money involved.

The first step to improve conditions would appear to be a more rigid control over the use of public places for storage purposes. If warehouses are not available to meet the demands at all times, suitable space removed as far as possible from the danger of fire should be set aside and carefully guarded while in use. Inexpensive sheds roofed with fireproof material could be erected close to loading stations, and the hazard thus reduced. The insurance companies might make a prohibitive rate on unprotected cotton, which would put the holders of collateral on guard. There is nothing better in the world to loan money on than cotton. It should command reasonable rates. The negligent manner of handling it produces an additional tax, both for insurance and banking facilities.

Commenting on the large fire losses this last year, a newspaper writer stated a few days ago that the situation in the South has been so serious that at times it has looked as though the companies would cancel existing policies and decline new business. This, however, has been averted by promised improvement in conditions and increased rates. It is further stated that the future attitude of the companies depends largely on the results of the coming season and the correction of the abuses in the conduct of the business, both as to storage and the keeping of accounts. Now is the time for the insurance interests and the bankers to begin drawing the lines tighter than ever. Too heavy a penalty cannot be placed on those who not only fail to protect their own property, but whose carelessness endangers the property of others.

During the last few years a decided improvement in warehouse facilities has developed. Great structures of fireproof construction, divided into units, completely sprinklered, have been erected at several points. In such cases a material reduction in the insurance rate has automatically followed, and the value of the receipt as collateral has increased. A word of warning may not be out of place here, for in spite of every precaution against fire cases have been known where all the ingenuity of man has been made negative through the piling of cotton to the very roof, absolutely destroying the efficiency of the sprinklers. Remarkable, isn't it?

It is not my purpose to bore you with a lot of figures. Fortunately for you, but unfortunately for the subject under discussion, statistics of cotton fires, specifically, are conspicuously lacking, poorly classified, incomplete as to losses, and with few causes listed.

During the first eight months of 1916, the most reliable source of information on cotton fires listed a total of fifty-seven—probably far

from complete, or even accurate—involving total losses of \$9,019,000.

This aggregate of losses, however, includes much other property, and therefore is far too high, but thus far there is no method of separating other from cotton properties and of subdividing cotton properties into mills, warehouses, loading sheds, vehicles of transport, and the cotton itself. These fifty-seven fires may be classified as follows:

	No.	Loss.
In transit or undelivered at terminals..	11	\$1,626,000
Cotton warehouses ..	20	503,000
Cotton gins	26	6,890,000
Totals	57	\$9,019,000

Included in the third item is \$5,000,000, charged to the Paris (Tex.) conflagration, and nearly all of the fifty-seven items include large percentages chargeable to buildings, etc.

The incomplete nature of the statistics is to be noted in the fact that causes are given in only six instances, and that in eleven cases there is no estimate of the loss.

In most instances, also there is no statement as to the actual amount of cotton destroyed. Only fourteen items of this kind can be tabulated from the figures. They are:

	No. Cases	No. Bales
In transit or undelivered at terminals	4	10,300
In warehouses.....	8	9,874
In gins	2	10,500
Totals	14	30,674

If the average price of the bale has been \$60, these figures represent a wastage of approximately \$1,900,000. There is no means of computing possible salvage.

From the same record it is learned that during the same period there were twelve recorded fires in cotton textile mills, involving losses of \$306,000.

It is interesting to note that if the 57 cotton fires are held down to the actual available figures of cotton involved, the loss per fire is well in excess of \$33,000, whereas the average loss for the 12 fires in cotton textile mills is \$25,500. This fact alone may be safely regarded as an index of the greater care taken to safeguard the manufacturing processes, or, conversely, the negligence attendant on the handling of the raw product.

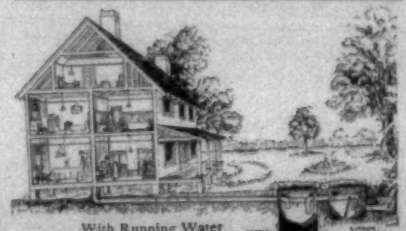
With these things, of course, it may be said that the mill men are not directly concerned, but it would be well for them to make a concerted and energetic campaign for the most effective safeguarding of cotton, all the way from the plantation to the mill. It would be a work of conservation that inevitably would be reflected in quicker realization of more equitable prices on the raw product, tending to greater stabilization of values in finished goods and ultimately being reflected favorably in the credit fabric of the industry.

But, it may be said, the mill men have been the pioneers in fire pre-

vention and protection, are today leaders in the movement, and by their efforts have revolutionized not only fire protection, but also fire indemnity—the basis of credit. This is true, but the fabric that has been woven is by no means perfect. There are weak spots which demand your attention.

It is well for you to give careful thought to these points of weakness in your defensive armor against fire, especially as every cotton manufacturer realizes the close relation between the stability of the industry and the nearly perfect fire control made possible by the development of the automatic sprinkler. It is true that the automatic sprinkler had its inception as well as its development in the needs of the cotton industry. It is equally true that without the perfect development of the automatic sprinkler the present status of the cotton industry would have been impossible.

Mr. E. V. French, vice-president of the Arkwright Mutual Fire Insurance Company, repeatedly has emphasized the fact that production costs have been materially lowered because the development of sprinklers has made possible the use of large areas in factory buildings with all hazards effectively



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safeguarded. Mr. H. L. Phillips, manager of the Factory Insurance Association, elaborating on the same point, told the cotton spinners that by the development of sprinklers, coupled with the adoption of construction standards, they had introduced a new principle in fire insurance, which is fire prevention. Mr. Uberto C. Crosby, a noted stock insurance executive, pointing out the change from underwriting losses in hazardous risks at high rates to underwriting profits in the same risks at low rates, declared: "The automatic sprinkler was the dominant factor in the transformation."

The sprinkler has stabilized the cotton industry, reduced factory costs and the cost of indemnity, given the only real insurance against loss by interruption of business, and thereby has been an important factor in establishing the credit of the industry on a basis that would not have been possible without it. Its chief weakness lies in the human element. We can trust its automatic features, but when man intervenes he frequently does something he should not do, or leaves undone something he should have done. It is therefore important that you should earnestly and sincerely take upon yourselves the responsibility of minimizing these human defects and deficiencies as much as possible, so that fire control may be more perfect, your industry still further stabilized, and your credit given stronger and higher bulwark.

A lot more could be said along this same line; in fact the supply of material is inexhaustible, but I must have a few minutes in which to discuss in a general way the significance of the fire waste in America.

Two hundred and fifty million dollars represents the annual average fire loss for a period of ten years. This equals an average per capital of about \$3.00. Add to this the amount paid for insurance each year and you would have money enough to open a sizable bank capable of extending all of you a reasonable line of credit. The losses for the first eight months of 1916, as compiled by the Journal of Commerce, aggregate about \$160,000,000. If the same ratio prevails during the remaining months, 1916 will easily secure a prominent place in the Hall of Flame.

It was for the purpose of checking this drain on our resources that the National Fire Protection Association was formed, and while it is difficult to show that any material reduction in the amount of the annual loss has followed, I am inclined to believe that were the loss figured on the percentage basis, using the value of our resources as the starting point, the result would be found most encouraging. The Association has attracted to its support men engaged in all lines of business. Naturally, the greatest number of its members are those whose work has thrown them in direct contact with the objects of being made to secure the general

support of, all business men, including your good selves. The principal motive which prompted me to appear here today was the opportunity afforded to bear testimony to the work of the organization and to ask your undivided support.

During the twenty-odd years of its existence, the Association has influenced many important changes. It has framed and secured the enactment of ordinances and laws. It has formulated standards which are recognized by the highest authorities on fire prevention. It has prepared and distributed literature covering every phase of the question. Its campaign of education has been carried throughout the land and has extended even into the public schools.

All this has resulted in the adoption of better building methods and stronger fire fighting facilities; increased protection against fire for both property and life; cleaner cities and cleaner homes; and, gradually, the development of a keener sense of the personal responsibility resting upon every individual.

A noted authority on fire prevention has in a few words furnished a text which every business man could profitably follow. It is, "Keep your property clean. Half of all American fire waste comes from careless accumulation of dirt and rubbish and disorder. Teach your people cleanliness and order, and organize them to detect and extinguish fire."

Before closing, I would call your attention to a country-wide movement in the interest of fire and accident prevention. The National Fire Protection Association and the National Safety Council have joined forces and on October 9th, the anniversary day of the Chicago fire, will hold meetings in many places throughout the country. The co-operation of organizations like your own will be welcomed, and your individual support will not only show your appreciation of the movement, but will be a demonstration of good citizenship.

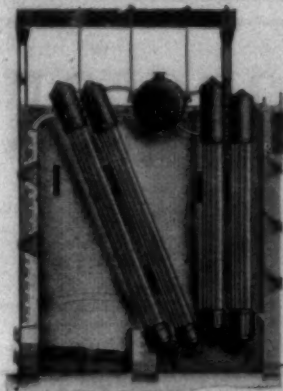
T. L. Ross Dead.

T. L. Ross, formerly of Concord, N. C., and who is prominently connected in that section of North Carolina, died at Charleston of paralysis. For about eight years Mr. Ross was superintendent of the large cotton mills of the Cannon chain at Kannapolis and prior to that had worked for the same company in Concord.

Southerners at New London.

The following men from the South attended the meeting of the National Association of Cotton Manufacturers at New London, Conn.: Jno. A. Law, Spartanburg, S. C.; J. J. Bradley, Huntsville, Ala.; T. H. Rennie, Pell City, Ala.; T. B. Stevenson, Langley, S. C.; John Hill, Atlanta, Ga.; Stuart Cramer and David Clark, Charlotte, N. C., and S. F. Patterson, Roanoke Rapids, N. C.

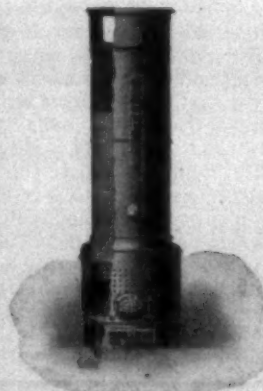
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THE W. M. KELLOGG CO.
New York
Manning and Water Tube Boilers
THE BIGELOW COMPANY
New Haven, Conn.

Effective Mill Ventilation.

(Continued from Page 3.)

above described manner is that the incoming air creates a cold zone near the openings and draughts from the windward to the leeward windows where there are such. While in the case of an air-cushion room, the incoming wind compresses all of the air in the room and comes to rest on the window side of the room, so that when the back-draught of the escaping air takes place with a momentary relief of the wind pressure, the air that has shortly before entered is expelled and the air on the far side is not changed but reoccupies the space near the windows.

It is therefore necessary, if the windows are to be used for ventilation, to provide a means for the air to enter without producing cold zones or draughts. It is also important that the incoming fresh air shall produce a circulation of all of the air in the room.

The apparatus for making wind pressure alone accomplish these results is very simple.

The air deflector is made of steel plate and is attached by a simple means to the window casing inside of the lower sash. It consists of concentric vanes 1 inch apart, thus forming six 1-inch passages, having a curvature of 90 degrees. The amount of incoming air is regulated by adjusting the height of the lower sash of the windows.

The air deflector, as designated, is a most efficient apparatus for changing the direction of a current of air. Theoretical calculations and actual experiments have shown that an air deflector of this size will deflect a 6-inch current of air 90 degrees with a loss of only 13.3 per cent of its velocity energy or an efficiency of 86.7 per cent. In the computation of which I have already spoken, applying it to the typical room I have assumed, it was shown that the windows with a clear opening of a little over 3 inches would deliver the requisite amount of air to the room. If the windows were equipped with air deflectors the opening would be 3.6 inches, and by means of their deflection through an arc of 90 degrees the air would be delivered to the room not horizontally, as through a mere open window, but in a vertical current moving upward to the ceiling. This vertical current immediately, however, produces a rotary action on the air unit of the room, and thus there is a slow circulation through the whole room and the vitiated mixture passes out of the leeward windows. In the case of an air-cushion room this rotary action produces a circulation of all of the air in the room and when the reversal of the current takes place through a diminution of wind pressure, even momentary, it is the vitiated air that is in the neighborhood of the deflector that passes out and not the air that has recently come in and has been thrown toward the ceiling and which has now drifted toward the far side of the room.

An important feature of such a deflector is that it is equally efficient whether the current is inward or outward. In other words, it is

as easy to get the vitiated air out as to get the fresh air in. Though excess pressure in the room be very minute, the apparatus is still efficient and consequently satisfactory results have been obtained in producing in such a room a quick response to a variation of outside wind pressure.

For the solution of the accessory problem of heating the supply of fresh air thus introduced in using windows in this manner, it is desirable that the heating pipes or radiators shall be placed between the floor and the bottom of the lower sash. Such location obviously produces the most satisfactory results, for the heated air adjacent to the radiating surface rises and protects the occupants of the room from being chilled by the incoming air before it is heated. The rising hot air and the incoming cold air mix near the ceiling and the cold air does not then fall on the heads of the occupants of the room. As the incoming cooler air is delivered in an upward current close to the windows it insulates the glass as a heat conductor and prevents the loss of heat by radiation.

The slow circulation of the air in the room increases the capacity of the radiating surface, as it is well known that if air is brought to a radiator, impinges against it and passes on, less surface is required to heat a given amount of air than if the air should remain stagnant or should circulate simply by convection currents.

This method of ventilation has been used in a large number of rooms of all sizes and shapes and many striking results have been obtained. One room in a factory was equipped with these air deflectors and a description of the results may be of interest.

This room 100 x 100 x 13 feet had ten westerly windows 4 feet 3 inches wide and eleven easterly windows 5 feet wide. There were two hundred operatives, therefore, requiring at least 400,000 cubic feet of air per hour. It was an obvious corollary of this principle of ventilation that either the doors at each end of the room should be kept closed or that the rooms into which they opened should also be equipped with deflectors.

After the installation a test was made with the doors closed. Before work started in the morning thermometers at the ceiling and floor showed a difference of 8 1-2 degrees in temperature. The windows were then opened on only one side (the western) and the room was run as an air-cushion. In about an hour the thermometers registered less than 1 degree difference between the floor and ceiling. The anemometer showed the periodic reversal of the currents and the average temperature was maintained at 65 degrees in the room, the outside temperature being 25 degrees.

This equalizing of the temperature showed conclusively the circulation of the air and the ability of the heating system to take care of the incoming cold air.

I might describe many instances of similar results, but as the above is typical, I feel that it is sufficient

(Continued on Page 15.)

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DURHAM, N. C.

Paraguayan Market For Cotton Goods.

The value of Paraguay's purchases of foreign textiles generally exceeds that of any other line of imports. In 1912 Paraguay imported \$1,462,367 worth of textiles; in 1913, \$2,183,714 worth; in 1914, \$980,838 worth, and in 1915, \$771,267 worth, and cotton manufactures formed fully 80 per cent of these cargoes.

The great drop in imports during the past two years from the values in 1913 perhaps needs a word of explanation. During 1913 the importers, anticipating a season of prosperity and influenced by the long-credit terms allowed by European exporters, laid in large stocks of textiles. When the expected season of prosperity turned out to be one of crisis, with buying at the lowest possible ebb, Asuncion merchants found themselves with large stocks of goods and few calls for them. The result has been that practically no textiles have been imported for two years.

As there are no textiles manufactured in Paraguay, and as this line is one for which there is always a demand, there is a shortage now of practically all kinds of fabrics. In cotton goods this shortage is especially noticeable.

The countries which have supplied the greater part of the cotton goods imported into the Asuncion district in the past were Great Britain, Germany, and France. There is some difficulty in securing certain lines of cotton goods from Great Britain at present; red and black prints and khaki (for which there is a considerable demand here) can not now be had at all from this source. Prices have risen sharply—from 25 per cent on some goods to 75 per cent on others—the increase on the whole line of British cotton goods averaging about 40 per cent. It is impossible to obtain goods from Germany, and practically impossible to obtain any textiles from France.

Asuncion importers are beginning to turn their attention to the United States as a market for the purchase of cotton manufactures. If an earnest and intelligent effort is made at this time by American exporters, there appear to be no serious obstacles in the way of securing a large part of the Paraguayan cotton goods trade. It must always be borne in mind, however, that European exporters have been supplying cotton goods in a manner most satisfactory to the importers for a long while. To make permanent customers out of those Asuncion dealers who now buy from the United States through necessity, it will be necessary for American manufacturers to cater to local tastes and customs.

It may be said in general that there is a considerable call in the Asuncion district for cotton goods of all kinds, but the greatest and steady demand is for such staples as percales, unbleached white shirtings, prints of all kinds, unfinished gray cloth, ducks, calicoes, ginghams, oxfords, drills, khakis, and muslins. There is also an important trade in cotton cashmeres,

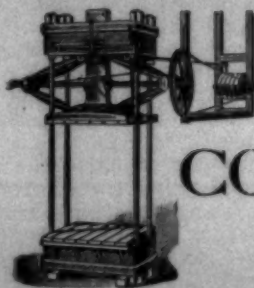
trouserings, crepe, cretonne, bombazine, and mercerized dress goods. The importers here like to have percales in bolts of 30 yards, unbleached white shirtings in bolts of 20 yards, drill in bolts of 30 to 40 yards, and muslins and other fabrics for women's garments in bolts of 40 yards. Most white goods are preferred in book fold.

There should be a fair demand for the various classes of wash suitings for men now so extensively used in the United States. Suitings of this kind have not as yet been introduced here. The cheap and medium-priced grades would find the most ready acceptance in Asuncion. Wash clothing is worn by all classes for the greater part of the year, and by the poorer people during the entire year. As the duty on ready-made clothing is high, the material for clothing is imported and made up here.

There is a large demand for cotton blankets here, especially in cheap grades. These blankets are used by the poorer people as both bed covering and wearing apparel. As most of these blankets sold here are of the cheapest possible material, many of them being made from cotton waste, there is a constant demand for new blankets, the wearing qualities not being their strong point. The favorite sizes are from 125 by 175 centimeters (49 by 69 inches) to 140 by 200 centimeters (55 by 79 inches).

As regards methods of introducing cotton goods, Paraguay is a market for export commission houses and manufacturers' agents rather than for the manufacturers. In the first place, an importer here can buy from an export commission house his whole line of cotton goods. There is then but one order to make out, one payment to arrange for, and one shipment to attend to. When buying from the manufacturer who specializes in a single article, the importer is obliged to place a great number of small orders and attend to a great number of shipments. Further, the expense is increased to a considerable extent. Importers here also have an idea that in ordering a large supply of goods through an export commission house they will receive better terms than in ordering small lots from manufacturers.

Among other reasons that incline importers here to favor buying through export commission houses rather than direct from manufacturers is the general reluctance of manufacturers to allow credit, while export commission houses in many cases give credit or at least do not demand cash with order. Most of the large importing firms here are also exporters, their trade in a measure being barter of commodities. Export commission houses are prepared to dispose of the commodities exported by merchants here and arrange settlement for goods imported. While cotton goods constitute the principal line of many of the Asuncion import houses, all engage in general importing, and they purchase their stocks of other commodities through the export commission houses that handle their cotton goods orders.—Commerce Reports.

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Monaghan Plant

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starch, and is thus unable to render the service which makes for confidence in it. The Arabol Mfg. Co., 100 William St., New York City, after exhaustive study of the problem in their laboratories have on the market a truly neutral size: Arabol Soluble Softening Oil. They claim it is especially valuable on warps which require sizing to be light and at the same time capable of rendering good service.

DISCUSSIONS BY PRACTICAL MEN

Effect of the Keating Bill.

Editor:

Your question and remarks regarding the Keating child labor law should be of very grave interest to every one connected with a textile mill, especially in the South, where we have a great many mothers and some fathers under sixteen years of age, and I hope to see it fully and freely discussed in your pages.

I am quite sure that all will agree with you that the law is not only wrong, but in view of the fact that every State in the Union has a law preventing children working in mills under fourteen years of age, except one which has a thirteen year age limit, it is really absurd and unnecessary.

It will require a large number of Federal inspectors throughout the country and cost the American people hundreds of thousands of dollars in salaries, railroad and hotel expenses, to keep this army on the road to accomplish exactly what the people of each State are today paying for and accomplishing through their labor departments and State inspectors.

Having lost both my parents when quite young I am exceedingly thankful that there was a cotton mill open to me, which I entered at the age of ten instead of having to take heavier work on the farm at longer hours, in the early morning dews and midday hot sun, without pay, schooling or industrial training. This was thirty-five years ago, in the days when we worked from 6 A. M. to 7:30 P. M., under very much worse conditions than today and if affected my health I have not discovered it to date, but today a sixteen year old boy cannot work more than eight hours a day without injury to his health. Land-o-goshens! What a change! Such long hours as I and others of the time had had to put in then are not good for either children or adults, but if it was bad for the cotton mill children then why is it not bad for the helpless tenant cotton growers children of today.

With my experience of thirty-five years constantly in the mills I know that the cotton mills of the South

are one of the greatest blessings God ever sent to the poorer classes of a people impoverished by war.

However, we are facing a new condition; one to which we must adjust ourselves, whether we like it or not, and the question is "How shall we meet it?"

As I view the situation the following is what we are confronted with: In the South we are already short of labor. If we dispose of all those under sixteen the shortage will be very much greater than at present. For our supply of labor we are dependent on our Southern people. I have had the advantage of seeing a great deal of the class of foreign labor used in Eastern mills and I trust we will never be burdened with a like class.

In each of our Southern States we now work sixty hours per week, one in which the law is strictly ten hours a day. I feel quite sure that the mills will not adjust the ten hour labor to the eight hour day; there would be no advantage in this, not even the Saturday half-holiday. Neither will they adjust the eight-hour labor to the ten hour day. It seems, therefore, that the only solution is to dispense with the eight hour labor.

If we dispose of all those under sixteen, will we have sufficient labor to run all our machinery to full capacity? I doubt it very much.

If we retain those under sixteen the mill will not only be out of balance, but can they be had or will they be willing to work at all for 20 per cent less than the ten hour labor? Will the ten hour labor be satisfied if the eight-hour labor receives the same pay?

Those affected by the eight-hour feature of this law generally make less than the older more experienced help, even at the same rate, therefore, if we keep them it will be necessary that they make as much as formerly. Since we are already short of labor there is not enough to use them in two shifts of five hours each. In case this were possible it would be an expensive proposition because they will not work for half the former price.

It has been suggested that the

mills could or would put in 20 per cent more spinning and run it eight hours, but all the help in a spinning room are not under sixteen; at least half are over sixteen. Therefore, if we work the older help on spinning and spooling eight hours, what will the help in the other departments have to say about it? In fact, not all the mills are financially able to put in 20 per cent more spinning at the present price. Even if they were, their buildings are designed and built for the present balanced equipment.

I note "Dan's Spooler" suggestions. This might apply to a very few mills on certain counts, but not to the industry as a whole. As stated above, not all the help in a spinning room are under sixteen. Also both spinners and spoolers are constantly changing, therefore, at different times you have more or less help under sixteen and I doubt if you could keep it balanced in any mill.

"R. N. G." says use time clocks on the doffers, but the government will not permit this and should it be practiced the law will be amended. I am sure you will agree that it is bad enough as it is. Even if this was permitted, what is the gain since you have a number of spinners under sixteen that would have to go out and leave the doffers in?

If all the mills should adopt an eight-hour day in order to use those under sixteen this would not permit us to have our usual half-holiday on Saturday, since we cannot use those under sixteen more than eight hours in any one day.

Also, an eight-hour day would raise the cost of production 20 per cent and reduce the earning capacity of capital more than 20 per cent, which would make what we are now producing cost us nearly 50 per cent more without the means to meet it. Even if the help should get a 50 per cent increase in pay the cost of production would again go up in the same ratio, therefore, it seems that the very people whom this law was intended to benefit will be the greatest sufferers.

It has the appearance of a move on the part of the present administration to enforce an eight-hour law by eliminating all help under

sixteen. If the Supreme Court finds this law to be constitutional I believe that a reaction will finally set in to get it repealed. It is certainly a knotty problem. However, the following are my plans for meeting it:

I have 55,000 spindles fully equipped with a successful roving clamp and spinning frame cleaner. My frames will run from doff to doff without a spinner near them. They will keep the thread-board, roll-beam, back-board, and lower creel cleaner than could be done by hand. If an end breaks the roving will stop feeding instantly, therefore no more laps, spoiled rolls, waste or cleaning to deal with. I am at present running my warp thirteen hours a day and my filling twelve hours. The warp is 21's, 7-inch traverse, 2 3-4 gauge, 1 3-4-inch ring, speed 128 R. P. M. The filling numbers are 16's to 29's, 1 7-16-inch rings, 2 3-4 gauge, 7-inch traverse, all single roving. The following is a count of ends broken and and roving out after a one-hour run on the warp in the evening after the help left the mill for twelve days in August, 1916, which is our worst month for spinning: (See table on next page).

I have an efficient, cheap system by which the yarn produced from each side of spinning can be weighed very rapidly. I therefore pay my spinners, doffers and section men by the pounds produced, including the over-time made in their absence. I like this better than the hank clock, because you can make hanks without producing yarn.

In view of the national child labor law I am now adding the price of doffing to the price of spinning, reducing my spinners to a less number of sides, putting my doffers to spinning and training all to do their own doffing, as fast as possible. I find my help like this better than the old system, because their work could not become torn up and put them behind while doffing; since they do not have any more roll laps or cleaning to do it will take care of itself and they can remain with a side until the doffing is completed.

The advantage of this system to the mill is this: No ten hour hand's work will be affected by the ab-

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Tops Reclothed.

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Cotton Mill Machinery Repaired

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Record during two weeks of spindles operated after stopping time, August 7th to 19th, 1916.

Filling at 7 o'clock P. M.—1 hour extra run in the evening.

Date	Total Spindles	Total non-pro- ducing 7 p.m	Ends Broke	Roving Out	%N.P.	%Ends Broke	%Roving Out
8-7	24480	1498	1102	396	.061	.045	.016
8-8	24480	1562	1255	307	.064	.051	.013
8-9	24480	1759	1472	287	.072	.060	.012
8-10	24480	2207	1720	487	.090	.070	.020
8-11	24480	1610	1361	249	.066	.056	.010
8-12	24480	1623	1334	289	.066	.054	.012
8-14	24480	1380	1078	302	.056	.044	.012
8-15	24480	1639	1301	338	.067	.054	.013
8-16	24480	1679	1301	378	.069	.053	.016
8-17	24480	1668	1370	298	.068	.056	.012
8-18	24480	2304	2006	298	.094	.082	.012
8-19	24480	2485	2144	341	.101	.087	.014
Total	293760	21414	17444	3970	.073	.059	.014

Warp at 8 o'clock P. M.—2 hours run in the evening.

8-7	28104	4825	3235	1590	.171	.115	.056
8-8	28104	5169	3141	2028	.184	.112	.072
8-9	28104	4753	3348	1405	.169	.119	.050
8-10	28104	5082	3941	1141	.181	.140	.041
8-11	28104	5199	3599	1600	.185	.128	.057
8-12	28104	4436	3217	1219	.158	.115	.043
8-14	28104	5029	3663	1366	.178	.130	.048
8-15	28104	4815	3500	1315	.171	.124	.047
8-16	28104	5032	3626	1406	.179	.129	.050
8-17	28104	5194	3872	1322	.185	.137	.048
8-18	28104	5606	4296	1310	.199	.152	.047
8-19	28104	4625	3281	1344	.164	.116	.048
Total	337248	59765	42719	17046	.177	.127	.050

sence of an eight hour hand. In other words, I will not be forced to stop the work of a number of ten hour spinners because of a lot of eight hour doffers, but only the work of the eight hour help will be affected in their absence and I can continue to get ten or more hours from their sides, which is governed by the time between doffs by leaving it running through the noon hour and after they leave it in the evening.

On counts that doff only once a day it could be left running all night or until ready to doff again without the attention of more than one man by doffing just before closing time in the evening.

We do not know what the future will be but I believe it is the intention of the majority to eliminate all

help under sixteen. It would suit me a great deal better to do this if sufficient adult help can be had, but I doubt it very seriously. In the event I do find it necessary to use a few of the eight hour help to keep my machinery going, I am sure I can do so without affecting the organization, keep my mill balanced and have less confusion with the improvements and system as above outlined, all of which is open to investigation by any one who is interested.

I would like to hear from others on this important question, but I doubt if the average overseer, superintendent or manager has given it the serious consideration it deserves or that they will give it a year hence.

R. G. F. H.

F. M. Osteen Killed in Auto Wreck.

F. M. Osteen, for many years superintendent of Poe Manufacturing Company, Greenville, S. C., and a prominent mill man of that section, was killed Sunday night about 10 o'clock two miles beyond Travelers Rest when the Overland car in which he was riding turned over down an embankment. None of the other occupants of the car, all of them members of the Osteen family, were injured, save for slight bruises. William Osteen, son of the dead man, was driving when the accident occurred.

Mr. Osteen and several members of his family were returning from Asheville, and were running without lights. Some fifty feet ahead was a machine with lights, and the Overland was trailing this car. The leading car ran close to an embankment, and William Osteen following and running about eight miles an hour, ran a trifle closer. The dirt gave way, and the machine turned over several times down the embankment. F. M. Osteen was sitting on the outside, in

the back seat. He was crushed by the weight of the machine, and died soon after the accident. In the back seat with Mr. Osteen, Sr., were Mrs. William Osteen wife of the man who was driving, and Richard Osteen, son of the dead man. In the front seat, in addition to the driver, were Mrs. F. M. Osteen and her son, Fred, who was in his mother's lap. The escape of these occupants is little short of miraculous. In some way, they became clear of the machine, and were not pinned beneath it. The driver was unhurt, except for bruises.

Clinton J. Morgan and Eugene Smith, of Greenville, were also returning from Asheville, and driving not far behind the Osteen car. They picked up the injured man who was still conscious and brought him to the city hospital in all possible haste. William Osteen, accompanied his father on this ride. Examination at the hospital showed that Mr. Osteen had been dead several minutes before he arrived there, death overtaking his somewhere between Travelers Rest and

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Greenville. A physician attended him at Travelers Rest.

F. M. Osteen is survived by his wife, and the following children: Mrs. W. F. Davis, Misses Nell, Mary, Margaret and Alice; Messrs. William, Richard, Fred and Frank Osteen. His mother, who also survives, lives at Piedmont. Champ Osteen the ball player, is a brother of the dead man. J. S. Osteen, of Piedmont, is also a brother. His sisters are Mrs. R. A. Fowler, of Piedmont and Mrs. William Thatcher, of Richmond.

Mr. Osteen, who was 52 years old, was born in North Carolina. He moved to Piedmont, and there started to work in the mill. His rise has been constant in the mill world. Starting with nothing save his own ability, integrity and energy, he has worked his way up until he became one of the best

known mill men of the state. He started the Brandon Mills, of Greenville, after moving to Greenville sixteen years ago. For ten or twelve years he has been superintendent of the Poe Manufacturing Company, of Greenville.

Lace Factory For Southern Negroes.

New Decatur, Ala.—A lace factory to be financed by southern negroes, to employ negro labor and operate with a working capital of \$2,000,000, is being projected here by Mrs. George A. Nelson of England, said to be a large property holder in this section.

The plan is to have 400,000 negroes in the south contribute \$5 for the establishment of the factory and bring expert lace makers from Brussels to teach the employes how to make lace.

SOUTHERN TEXTILE BULLETIN

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THURSDAY, SEPTEMBER 21, 1916.

Will Test Keating Bill.

We have received a number of inquiries relative to the probability of the Keating Child Labor Bill being carried to the United States Supreme Court and we can state with authority that it will be done. Negotiations are now under way with a Philadelphia attorney of national reputation, as we all recognize that it is no case for a little lawyer, but will require lawyers of unusual ability.

In case the Philadelphia lawyer is retained and sufficient funds are available an effort will be made to also secure ex-Senator Bailey of Texas, who is rated as one of the ablest constitutional lawyers in America. Action to declare the Keating Child Labor Bill unconstitutional can not be begun until Sept. 1st, 1917 when it goes into effect and the time required to get it to the United States Supreme court is entirely problematical.

Some lawyers believe that because of its great importance and its bearing upon other proposed legislation, the courts will advance the suit rapidly and that the time required for a decision by the Supreme Court will not be long. The action when it is brought will create widespread interest.

A New England Meeting.

Our editor had the pleasure of attending last week the meeting of the National Association of Cotton Manufacturers at the Griswold Hotel, New London, Conn., and it was exceedingly interested in the problems of the industry as viewed and discussed from the standpoint of the New England cotton manufacturer.

In many cases our problems are their problems, but in many other cases we are working along different lines and there is little community of interest.

Apparently the most interesting address to those present was one by a representative of the National Civic League for the Improvement of Immigrants. Having no foreign labor we would not be interested in work of that organization, but the New England mills employ very largely immigrant labor and anything that tends to make that labor more loyal and efficient is naturally of great interest to them.

It appears that the Civic League for the Improvement of Immigrants, when called upon and paid, sends into the mills, in the disguise of mill operatives, trained men of the same tongue and nationality as the employees.

These representatives seek to gain influence with operatives and by private discussion and later by addresses seek to teach them loyalty to the mills and respect for the laws of the country of their adoption.

It is a form of welfare work and the discussion showed that while not yet very extensively used in New England it had in a number of cases been very effectively used in breaking up or preventing strikes.

Another subject of considerable interest was disclosed by an address on "Accident Prevention," by Mr. Alexander, of the General Electric Co.

The New England States are suffering today from unfair and unjust workingmen's compensation laws based upon the theory that accidents are due to unguarded or defective machinery, but Mr. Alexander was able to show by statistics that only a small per cent of accidents are caused by machinery and that more than 65 per cent of those in cotton mills are caused by agencies other than machinery. Falling down stairs, falling off ladders, slipping up on floors, etc., were shown to be responsible for many injuries.

The training of the operatives to habits of carefulness is more important and will prevent more accidents, declared Mr. Alexander, than all the guards that may be put on moving machinery.

The tariff law was, as always, a subject of live interest to the New England cotton manufacturers.

The cotton manufacturers of the South believe in "legitimate and necessary" protection whereas the New Englander for the most part, believes in protection to an extent limited only by the amount that Congress will permit.

They say that the South is politically hide-bound and in that they are correct, but the truth is that our manufacturing friends in New England are "politically hide-bound" to a greater extent than any other people in the United States. An overwhelming per cent of them believe that no good can ever be accomplished and that nothing right can ever be done by any administration which is not controlled by the political party with which they happen to be affiliated by reason of the fact that their fathers before them belonged to the same party.

We believe in protection and we believe that the present tariff should be raised, but we do not believe that it will ever be put back as high as the Payne-Aldrich Bill.

We honestly believe that our New England friends could and would accomplish more by taking a more

liberal view of politics and working to obtain necessary rather than abnormal protection.

We judge from the discussions that the National Association of Cotton Manufacturers is on the verge of a change in plan of organization with a view of making the association more practical and useful.

It is proposed to levy larger annual assessments upon the mills and employ experts to run several departments which will be of real and practical value.

The National Association of Cotton Manufacturers is a strong organization of live men and we enjoyed getting their viewpoint of the textile problems of today.

Hosiery Trade of Nottingham District.

Conditions obtaining in the Nottingham hosiery trade today differ little from those of a month ago, but it is reported that manufacturers are becoming somewhat concerned about the falling off in orders for future delivery. For the present there are enough orders to keep machinery well employed, and, therefore, there is no cause for immediate anxiety.

Considering the high price of wool, it is not surprising that heavyweight cashmere goods are somewhat slow in moving in large quantities. This applies to men's fashioned half hose and the best qualities of seamless goods, women's fashioned plain and ribbed hose, and also men's and women's fashioned wool underwear. During July another advance was made in the dyeing materials, which will have a tendency to hinder rather than to help the sale of goods which were already high in price. Nevertheless, it is reported that a satisfactory business is being done throughout the trade.

The lines most in demand in women's hosiery are cashmere hose, both seamless and fashioned, quantities of the latter being made with seamless feet. Black appears to be the predominating color, although a good line of fancy shades is being shown. Embroidered clocks and fancy sides are selling quite freely. There is a good demand for black and fancy colors, both plain and embroidered, in cotton, mercerized, and lisle thread hose. The same is true of the popular lines of cotton and artificial silk, or silk and cotton, in combinations of various styles and prices. Manufacturers of the more expensive silk hosiery are doing a very satisfactory business.

The heavy demand hitherto existing for light and medium weight underwear continues, the cut articles being most in demand on account of the lower price, in the merino finish, cotton and wool plated, and mixed fabrics, and it is reported that the sale of these goods is tremendous.

Yarns continue to bring high prices, although slight fluctuations have occurred in cotton and lisle thread. In the main, however prices are very firm.—Commerce Reports.

PERSONAL NEWS

Bulo Horton has resigned as night overseer of carding and spinning at the Duke Yarn Mills, Durham, N. C.

Will Buckner has resigned as second hand in No. 6 carding at the Riverside Mills, Danville, Va.

Rob Flowers has resigned as engineer and master mechanic at the Canebrake Mills, Uniontown, Ala.

G. R. Combs is now engineer and master mechanic at the Canebrake Mills, Uniontown, Ala.

E. L. Lolley has resigned as second hand in twisting at the Canbrake Mills, Uniontown, Ala.

L. E. Thornhill is now second hand in twister room at the Canebrake Mills, Uniontown, Ala.

J. L. Hart has been promoted to second hand in night carding at the Lenoir (N. C.) Cotton Mills.

Pink Lockey has resigned as loom fixer at the Kershaw (S. C.) Cotton Mills.

William Gaskin is now fixing looms at the Kershaw (S. C.) Cotton Mills.

Paul Holsonback has been promoted to overseer of spinning at the Little River Mills, Rougemont, N. C.

J. B. Holcomb has resigned as master mechanic at the Judson Mills, Greenville, S. C.

E. L. Wooten of Anderson, S. C., is now fixing looms at the Brogon Mill, of that place.

S. A. Moncrief has been promoted from second hand to overseer of No. 1 carding at the Profile Mills, Jacksonville, Ala.

T. T. Goings has resigned as overseer of spinning at Cowpens, S. C., to accept a similar position at the Brogon Mills, Anderson, S. C.

M. E. Riley has been promoted from carder and spinner to superintendent of the Acworth (Ga.) Mills.

W. D. Nail of Thomasville, N. C., has become second hand in speeder room at the Amazon Mills, Thomasville, N. C.

Edward Maylan, overseer of braiding at the Anniston (Ala.) Cordage Co., has purchased a five-passenger Chevrolet car.

J. E. Reese has resigned as overseer of carding at the Yount Cotton Mills, Walterboro, S. C., to become assistant carder at Graniteville, S. C.

J. P. Horton of Gastonia, N. C., has arrived in Chattanooga, Tenn., to take charge of the carding at the Thatcher Spinning Company of that place.

J. F. Davis of the Royal Mills, Charleston, S. C., has accepted position of overseer of carding at the Yount Cotton Mills, Walterboro, S. C.

W. D. Engle has accepted position of overseer of weaving at the Woodstock Mills, Anniston, Ala.

Wm. Van Zant has resigned as overseer of weaving at the Woodstock Cotton Mills, Anniston, Ala.

B. C. Williams has been promoted to second hand in spinning at the Alpine Mill No. 2, Morganton, N. C.

George Young has been promoted to second hand in No. 6 spinning at the Riverside Mills, Danville, Va.

M. L. Brady has returned to his former position as loom fixer at the Revolution Mills, Greensboro, N. C.

J. B. Rochester is now section man at the Union Cotton Mills, Lafayette, Ga.

John Dodd of the Loray Mills, Gastonia, N. C., is now fixing looms at the Louise Mills, Charlotte, N. C.

J. R. White of Belton, S. C., is now fixing looms at the Louise Mills, Charlotte, N. C.

Ed Tart has become overseer of carding at the Little River Mills, Rougemont, N. C.

N. W. Garner has resigned as overseer of weaving at the Wallace Plant, Jonesville, S. C.

Wayne Riddle has resigned as overseer of weaving at the Watts Mill, Laurens, S. C., and will take a rest.

R. F. Gardner of Gastonia, N. C., has accepted position of overseer of carding and spinning at the Gaston Mills, Cherryville, N. C.

R. B. Hunt has been transferred from overseer of carding to overseer of spinning at the Hamburger Mills, Columbus, Ga.

J. A. Coggins has been promoted from night overseer to day overseer of carding at the Hamburger Mills, Columbus, Ga.

C. S. McCloud has accepted the position as overseer of spinning at the Highland Cotton Mills, High Point, N. C.

R. B. Riddle has resigned as overseer of carding and spinning at the Graniteville Mfg. Co. No. 1, and moved to Columbia, S. C.

Bert Cushing has been promoted from second hand to overseer of spinning at the Graniteville (S. C.) Mfg. Co. No. 1.

Frank Clark has resigned as overseer of weaving at the Lydia Mill, Clinton, S. C., to accept a similar position at the Watts Mill, Laurens, S. C.

Geo. W. Turnipseed, superintendent of the Anniston Mfg. Co., Anniston, Ala., who was recently operated on for appendicitis and who was in a serious condition for some time, has recovered and is back at work again.



Mill machinery is kept in better condition. Your goods are not ruined by drippings with

Albany Grease

Send for samples and cup now. No charge.

YOUR DEALER SELLS ALBANY GREASE

ALBANY LUBRICATING CO.
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J. A. Carter has been promoted from second hand to night overseer of carding at the Hamburger Mills, Columbus, Ga.

W. P. Leister, superintendent of the Wallace Plant, Jonesville, S. C., has returned from a vacation at Mooresboro, N. C.

Richard Johnston has resigned his position with the Ethel Mills, Selma, N. C., to become second hand in spinning at the Liberty Cotton Mills, Clayton, N. C.

E. P. Floyd has resigned as second hand in weaving at the Victor Mills, Greer, S. C., to become overseer of weaving at the Wallace Plant, Jonesville, S. C.

Henry Guyton has resigned as overseer of spinning at the Little River Mills, Rougemont, N. C., to accept a similar position with the Erwin Mills No. 4, West Durham, N. C.

F. C. Henderson of Columbus, Ga., has accepted position of overseer of spinning at the Alexander City (Ala.) Cotton Mills.

Jas. Dauss has resigned as overseer of spinning at Villa Rica, Ga., and accepted a position at the Kincaid Mills No. 1, Griffith, Ga.

S. A. Scott has resigned as superintendent of the Acworth (Ga.) Mills to become night superintendent of the Adelaide Mills, Anniston, Ala.

C. A. Shelton has resigned as overseer of spinning at the Lois Mills, Douglasville, Ga., and accepted a similar position at the Meritas Mills, Columbus, Ga.

Wm. A. Burns has resigned as overseer of spinning at the Pelham (Ga.) Mills and accepted a similar position at the Lois Mills, Douglasville, Ga.

OVERFLOW PERSONALS PAGE 16.

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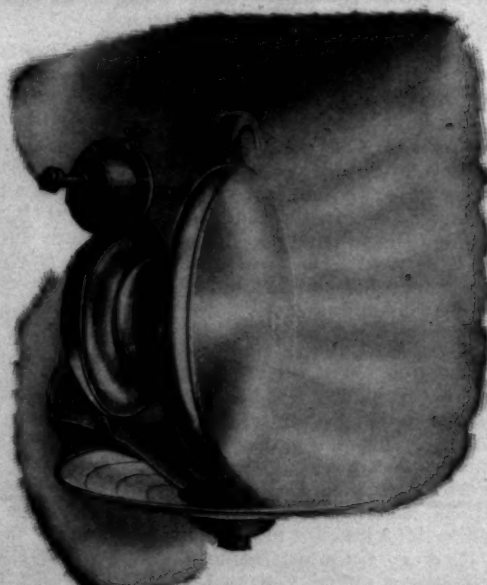
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MILL NEWS ITEMS OF INTEREST

Chattanooga, Tenn.—Notice of an increase in capital stock from \$30,000 has been filed by the Nick-a-Jack Hosiery Mills Co.

Columbus, Ga.—The Muscogee Mills now have a portion of their machinery installed and in operation in their new addition.

Lafayette, Ga.—The Lafayette Cotton Mills are erecting a handsome Community House for the use of their employees.

Athens, Ga.—The Princeton Mfg. Co. are adding 1,600 spindles and other new machinery. They are installing the Cramer system of humidifiers.

Eatonton, Ga.—The Imperial Cotton Mills have started weaving at night. The company is also building 20 new four-room cottages for their employees.

Chattanooga, Tenn.—The Thatcher Spinning Company expects to get their new mill started within the next 30 days. W. S. Young who will be superintendent is here getting things ready to put the mill in operation.

Alabama City, Ala.—The Dwight Mfg. Co. will build a new engine room. The company also has awarded contract for a three-story brick building in which they will install additional carding and spinning machinery.

Thomasville, N. C.—The Jewell Mills are building a new addition which will be 75 feet wide and 324 feet long. When the addition is completed the mill will be 150 x 350 feet. They will have an equipment of 12,000 spindles, and accompanying card room machinery.

Wilmington, N. C.—The Delgado Mills have replaced 100 looms with a like number of Crompton & Knowles looms. They have also added 59 Crompton & Knowles 2-box looms. They have replaced 18 Mason looms with new Mason looms with the Northrop attachments and added 12 new H. & B. spinning frames, one Saco-Lowell slubber, 2 Saco-Lowell speeders, H. & B. intermediates.

Conover, N. C.—Energetic citizens of Conover have raised \$2,500 by popular subscription for the purchase of 10 acres of land for a site for the new cotton mills John P. Yount, cotton manufacturer of Newton, is to erect this fall. He has accepted the site, and work is to commence immediately. When the building is completed, the mill purchased by Mr. Yount this year at Walterboro, S. C., will be moved to Conover. Fred H. Yount is operating the plant in South Carolina and will have charge of the business at Conover.

York, S. C.—Cannon & Co. have let the contract for the erection of about 50 cottages in the Cannon Mill village on the northeastern outskirts of York. The houses will cost around \$1,000 each, and will be built with a view to the comfort and convenience of their occupants. The mill authorities have made no announcement of their future plans further than the building of these cottages, but it is reasonable to assume that sooner or later their plant here will be enlarged.

Athens, Ga.—The Athens Mfg. Co. have just completed an installation of 3 slubbers, 6 intermediates, 3 fine speeders. All of these frames are of the latest Woonsocket chain drive type. The mill was recently changed from hosiery yarns to 2-ply tubes and skeins. The company is also remodeling all of the houses in its village.

Anderson, S. C.—The Builders' Lumber and Supply Company of this city closed a contract to build four 6-room cottages and ten 4-room cottages for the Brogon Mills. These cottages will be built in the mill village and are to be occupied by the mill operatives.

Work on the Brogon Mill cottages will be commenced within 10 days and will be finished by November 1.

Belmont, N. C.—Plans for a handsome two-story office building have been prepared by the management of the five cotton mills here, the Chronicle, Majestic, Climax, Imperial and National Yarn Mills. The building will represent an outlay of several thousand dollars, and will contain the offices of these cotton mills, the South Point Cotton Company, directors' rooms, etc.

The building will be fitted throughout with all modern conveniences and will probably be ready for occupancy by Christmas.

Chattanooga, Tenn.—The Signal Knitting Co., which is erecting a plant in North Chattanooga, has been reorganized as the result of the transfer of several blocks of stock from several of the original investors. One of the principal new investors is Dr. H. M. Evans, of Valparaiso, Ind., vice president of the First National Bank of that city. Dr. Evans succeeds Dr. W. A. Jones as president of the Signal Knitting Mills.

The capital stock of the Signal Knitting Co., is 150,000. One of the directors is authority for the statement that the plant should be ready for operation by Nov. 1. Three hundred employees will be required.

Stockholders elected the following new directorate: H. M. Evans, H. B. Finlay, W. A. Jones, E. A. Wheatley, Floyd Murphy, C. H. Huston, O. L. Bunn, George S. Arnold, and J. Kent Boyd.

Greenville, S. C.—An organization for the erection here of a mammoth building, in which to house the Southern Textile Exposition in the fall of 1917, has been perfected.

W. P. Anderson, a retired banker of Westminster, who moved to Greenville about two years ago, was elected president; Captain Ellison A. Smyth, vice president; Robert E. Bowe, secretary, and Edwin Howard, treasurer. The board of directors consists of W. P. Anderson, Frank E. Heymer, of Alexander City, Ala., president of the Southern Textile Association; A. B. Carter, secretary of the association; Gordon Cobb, chairman of the board of governors, J. E. Serrine, B. E. Geer, Milton G. Smith, Z. T. Wright and T. B. Wallace. Definite decision of a site will probably be taken up in the next few weeks.

Charlotte, N. C.—Fire in the warehouse of the Highland Park Mill No. 1 burned several bales of cotton and damaged a number of barrels of sulphite of lime, stored there to be used later in bleaching. Whether the fire started with the lime or a smouldering ember in a bale of cotton touched off the hemp in the southeast corner of Section No. 1 of the warehouse could not be determined. When the firemen reached the scene shortly after midnight the blaze was burning sullenly although the sprinkler system was working overtime in holding down the fire. It never got beyond the corner where it started and but for the damage of the water to the nearby barrels of sulphite of lime would not have given much trouble. As it was the firemen and others were busy for an hour or two moving out the inflammable stuff. The lime burned with a bluish flame that attracted much notice.

Fayetteville, N. C.—Fayetteville has secured another valuable industry, according to an announcement by the Chamber of Commerce. This is a hosiery mill to be established here by a company headed by one of the most substantial business men of Eastern Carolina. The company has leased the property on Person street formerly used by the Algodon Knitting Mill, which did a flourishing business here in the manufacture of knitted products up to five years ago, when for a combination of reasons it was forced to suspend.

The men back of the new mill, though they will not allow their names to be made public at this time, are such as to insure the success of the enterprise. The Algodon Mill is already being overhauled in preparation for its use. It will be remodeled, and sixty knitting machines installed at once.

Haw River, N. C.—In the Superior Court of Alamance County in an action entitled C. P. Albright, on behalf of himself and other creditors, against the Holt-Granite Manu-

facturing Company of Haw River, the Virginia Trust Company of Richmond, Va., was on September 15, appointed receiver of the property of the said, the Holt-Granite Manufacturing Company.

The receiver was authorized to receive propositions for the sale and purchase of the company's property. It is expected that a sale will soon be made to a new corporation and operation of the mills shortly be resumed. Nearly all the creditors have already approved of the offer of purchase made and it is believed that all will soon do so. The proceeding in court was instituted to avoid all questions of title and to the end that a satisfactory price may be obtained for the property.

Mortgage Sale of Dixie Mills.

To satisfy a second mortgage and to bring about a friendly reorganization by stockholders and creditors, Dixie Cotton Mills, La-Grange, Ga., of which R. C. Freeman is president, will be sold at public outcry on Tuesday, October 17.

Southern Textile Association.

W. P. Hamrick, chairman entertainment and arrangement committee, announces that the official date of the next semi-annual meeting to be held in Columbia, S. C., November 17th and 18th. Jefferson Hotel will be headquarters.

The rates at the different hotels are as follows: Jefferson \$1.50 and up, Imperial \$1.00 and \$1.50, Gresham \$1 and \$1.50, Jerome \$2.50 to \$4, Colonial \$2.

Mr. Hamrick has appointed the following mill men of Columbia to act as a committee as a whole to assist in arranging for the meeting: S. K. Oliver, H. L. Goble, C. D. Boland, T. M. McNeil, F. L. Drake, C. C. Brigman, C. R. Riddle, W. H. Moseley, Thos. Moore, S. W. Mims, J. O. Corn, Wm. P. Cargill, W. W. Greer, M. H. Turbyfield, R. L. Floyd, D. T. Bagwell, J. M. Moore, T. R. Hazel, J. B. Fennell, F. C. Olive, A. C. Boland, W. O. Jones, J. W. Brown, Jas. Atkinson, Sam Myers and S. Neal.

An auto trip will be arranged for all mill men going from the two Carolinas who have automobiles; J. M. Broom of Greenville, S. C., is chairman of this auto committee and those going by auto should write Mr. Broom and get in touch with him.

New Bleachery and Dyeworks at Cedartown, Ga.

The new plant of the Noble-Beveridge Co. is now in full operation and as the company has large contracts in hand for several of the largest converters in the country their output is taken care of for some time to come.

The officers of the company are

well known in the trade, especially P. J. McNarmara, the general manager, who was formerly superintendent of the Lanett Bleachery and Dyeworks; Fred Noble is president and Geo. Beveridge, vice-president, while prominent amongst the directors is Wm. Parker, president of the Standard Cotton Mills.

The company is at present making a specialty of dyed fabrics, uniform cloth, khaki ducks and drills, and waterproof duck for tarpaulins, and intend to make export orders a special feature of their business especially in their waterproofing department, their processes in this line being specially adapted for all climates.

Churches For Cotton Mills.

Inspired by a warm appeal from Fuller E. Callaway at Sunday morning's services, the First Baptist church took steps toward the building of churches in Hillside and Dunson Mill districts at LaGrange, Ga.

Paul F. Haddock Appointed Southern Agent For A. Klipstein & Company.

Paul F. Haddock, who for the past four years has been assistant to John L. Dabbs, Southern manager of A. Klipstein & Co., has been made manager of the Southern office, succeeding Mr. Dabbs, who resigned to become Southern manager of the National Aniline and Chemical Co., as noted last week.

Mr. Haddock is eminently qualified by virtue of his experience and training to take up the duties of Southern manager. A native of England, Mr. Haddock's first experience in the textile business was with the firm of Davies and Eckersly, Ltd., of Lancashire, Eng., that concern being a member of the Bleachers, Dyers and Finishers Association. With them Mr. Haddock had his first training in dyeing and bleaching. Some years later, Mr. Haddock, feeling that owing to the crowded conditions of the industry in England, his opportunities would be better in America, came to this country. Landing in New York with nothing in view, and as he expressed it, "all dressed up and no place to go," Mr. Haddock finally succeeded in landing a place as helper in the Lancashire Bleachery, at Waldwick, N. J. Some months later he was made superintendent of that plant, which position he held for a year. Later he resigned there to become superintendent of bleaching and finishing at the American Finishing Co., Memphis, Tenn. Mr. Haddock, after a year in Memphis, gave of his work there to accept a place with A. Klipstein, being first employed by them as a demonstrator, and later being transferred to the selling force.



Solves the Moisture Problem

If you have not the correct humidity in your plant for the material you handle—it will lose its moisture.

And you will lose the weight you paid for.

The Turbo-Humidifier puts back the moisture—giving the finished material its natural weight and saving your profits.

The Turbo delivers pure "pulverized water" into the atmosphere of your different departments. It insures in all seasons the right degree of humidity for any condition or material.

It will cost you only a red stamp to get proof of these fact claims. Ask for the proof.

When you buy raw Cotton, Wool, and other fibres you also buy enough water to depreciate your profits—if you do not put the water back into your finished product.

THE G. M. PARKS CO.

Fitchburg, Mass.

Southern Office 1006 Commercial Bld., Charlotte, N. C.

J. S. COTHRAN, Manager

Four years ago he was made assistant to the Southern manager.

Mr. Haddock enjoys a very wide personal acquaintance with Southern mill men and his host of friends will be pleased and gratified to hear of his promotion. As Southern representative, he will have entire charge of all of the business of A. Klipstein & Co. between Washington and New Orleans with offices at Charlotte.

A. Klipstein & Co. is selling agents for the E. C. Klipstein & Sons Co., manufacturers of sulphur black, sulphur brown, olive, gray and tan. E. C. Klipstein & Sons Co. will soon be manufacturing sulphur blue, the machinery and equipment already being installed for this work. A. Klipstein & Co. is also selling agents for the Bulls Ferry Chemical Co., manufacturers of double oils, soaps, sizings, softeners, gums, wax and all specialties used in bleaching, dyeing and finishing. This concern also manufactures oxitan, a new soluble tanning compound invented by W. A. Klipstein. A. Klipstein & Co. is also selling agents for the Klipstein Warner Chemical Co. with a big plant at Charleston, W. Va., manufacturers of tetraechloride of carbon, chlorine, chlor-bezol and muriatic acid. The company also sells the output of caustic soda manufactured by the Champion Fibre Company of Canton, N. C. It also carries a full line of imported and domestic chemicals used in the textile trade by paint manufacturers and tanneries.

Bound Brook Oil-less Bearing Co. Enlarge Plant.

The Bound Brook Oil-less Bearing Company are erecting a re-enforced concrete building 50 x 100, at their plant No. 2, to take care of the rapidly growing business in their Nigrum Impregnated Wood Bearing Department. The company is located at Bound Brook, N. J.

Editor Hit By a Ford.

While crossing 41st Street in New York one night last week David Clark, editor of the Southern Textile Bulletin, was struck by a Ford automobile, but by quick action escaped with only a sprained foot and a cut knee. Wm. H. Harhiss, formerly manager of the Hamilton Carhartt Mills of Rock Hill, S. C., but now a cotton goods broker of New York, who was with Mr. Clark at the time was struck by the front of the machine and badly bruised but not seriously injured. The Ford had turned into the curb to allow another machine to pass and darted out at high speed. Mr. Clark was not prevented from continuing on his trip to New England. It is bad to be hit by an automobile but ten times worse to be bumped by a tin Lizzie.

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Don't Pay Good Money for Impractical, Unmechanical and Often Worthless Fountains.

Here is a practical Fountain, which combines the Faucet and Bubble Features—takes care of the overflow waste, and insures

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This is an age of sanitary plumbing and the Sanitary Drinking Fountain is one of its important subdivisions.

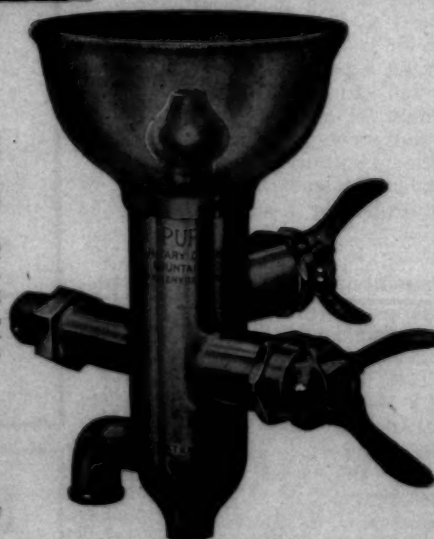
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Is made of heavy brass with extra heavy nickel plate. "Bubbler" easily controlled by separate "squeeze" handle. No spurts—no choking—inside regulation prevents "shower-bath." Faucet is controlled by another squeeze handle. Faucet gives full water pressure. Has thread for hose if wanted.

Write us the number of your employees and water pressure and we'll present an interesting proposition to you promptly.

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THE ONLY PERFECT SYSTEM OF AIR MOISTENING
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Cotton Goods Report

New York.—Business continued steady in the cotton goods market last week, with prices rising steadily. Cotton goods merchants expressed the opinion that prices are being moved to new high levels that may last for months and that will force both retailers and jobbers to new high prices.

Many of the staple lines were marked up during the week, the advances ranging from 1-2 to 1 cent a yard and even more in some cases. Considerable new business was placed during the last few days of the week on sheetings and pillow tubing and new prices were named on the well known lines. With cotton costing 5 cents or more a pound than year, more advances are due on finished goods. Buyers who keep in close touch with the situation realize that while goods are held at very high prices, they need not expect any reduction in the near future. Large handlers of cotton goods of a staple character are looking ahead and are willing to place orders with the mills for long forward delivery, provided they can induce the mills to take the business. There was more firmness seen during the week on brown sheetings and print cloth yarn goods. The demand for these goods was strong and steady, and the mills were slow sellers except where full prices were paid. Mills are asking selling agents to move slowly on future business at any price until the cotton necessary to make the goods can be had or whether the high production costs could be avoided.

Fine and fancy goods are going higher each week and the outlook for spring is better than it has ever been before. White goods houses have booked enormous orders at rising prices and there seems to be no end in sight as to where the buyers will halt their buying. Manufacturers using fine combed goods were in the market for further supplies last week at the prices which the mills asked for goods to be delivered in the first few months of the coming year.

A large business for future delivery was placed on coarse yarn goods for dress purposes, the weavers running from coarse ramie effects to fancy oxford and basket weaves.

It was another quiet week in the Fall River print cloth market, both buyers and manufacturers seeming indifferent as to new business. Some of the buyers expected to get concessions from the mill men in view of the considerable quantities of goods that have come on the market from second hands, but manufacturers held firmly to quoted prices.

Prices on cotton goods were quoted in New York on Monday as follows:

Print cloths, 28-inch,	
64x64s	4 3-4 —
28-inch, 64x60s	4 5-8 —
Gray goods, 39-inch,	
68x72s	7 3-8 —
38 1-2-inch, 64x64s	6 3-4 —
4-yard, 80x80s	8 3-4 —

Brown drills, std.	8 3-4 —
Sheeting, So., std.	9 1-2 —
3-yard, 48x48s	9 —
4-yard, 56x60s	7 3-4 8
4-yard, 48x48s	7 1-4 —
5-yard, 48x48s	6 1-4 —
Denims, 9-ounce	At value—
Denims, 2-20s	18 —
Selkirk, 8-oz. duck	15 —
Oliver, extra, 8-oz.	15 —
Tallassee, 8-ounce	14 —
Hartford, 8-oz.	13 —
Woodberry, sail d'k.	10% —
Mt. Vernon, wide d'k.	15% —
Alexander, oz. duck.	13c b'sis —
Buckeye, oz. duck.	13c b'sis —
Dreadnaught	15 —
Great Mallard	13 —
Republic, wide duck.	25% —
Republic sail duck.	20% —
Republic, U. S. A.	10% —
Ticking, 8-ounce	16 —
Standard prints	7 1-4 —
Standard gingham.	8 —
Dress gingham.	9 1-2 10 1-2
Kid finished cambrics ..	6 1-2 7

Hester's Weekly Cotton Statement.

Comparisons are to actual dates not to close of corresponding weeks. In thousands bales.

In sight for week	311
In sight same 7 days last year ..	244
In sight for the month	632
In sight same date last year ..	453
In sight for season	1,145
In sight same date last year ..	753
Port receipts for season	739
Port receipts same date last y'r ..	407
Overland to mills and Canada ..	
for season	28
Overland same date last year ..	27
Southern mill takings for season ..	245
Southern same date last year ..	282
Interior stocks in excess of ..	
Sept. 1.	34
Interior last year	27
Foreign exports for week	136
Foreign same 7 days last year ..	62
Foreign for season	632
Foreign same date last year ..	258
Northern spinners' takings and ..	
Canada or week	27
Northern same 7 days last y'r ..	34
Northern for season	127
Northern to same date last y'r ..	127

Statement of World's Visible Supply.

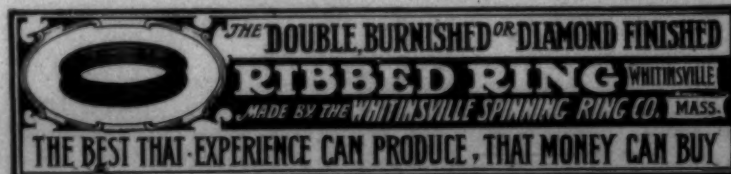
Total visible this week	2,788
Total visible last week	2,692
Total visible same date last y'r ..	3,822
Of this the total American ..	
this week	2,043
Of this the total American ..	
last week	1,932
Of this the total American ..	
last year	2,680
Visible in U. S. this week	889
Visible this date last year	1,268
Visible in other countries this ..	
week	1,899
Visible this date last year	2,558

The pessimist was suffering from rheumatism. "Every bone in my body aches," he complained bitterly.

"That's all right," said the optimist cheerfully. "You ought to be glad that you are not a shad."—Ex.

Our Spinning Rings SINGLE OR DOUBLE FLANGE
START EASIEST, RUN SMOOTHEST, WEAR LONGEST
Pawtucket Spinning Ring Co.

CENTRAL FALLS, R. I.



GEORGE C. VOLZ & CO., Inc.
COTTON CLOTH BROKERS

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The Desirability of the South

as the place to manufacture cotton goods is illustrated in the increase of 67% quoted by census department. We can offer attractive situations for those desiring to enter this field.

J. A. PRIDE

General Industrial Agent Seaboard Air Line Railway
NORFOLK, VIRGINIA.

B. & L. Bleachers Bluings

SHADE TO SUIT

Manufactured by

BOSSON & LANE

Works and Office

ATLANTIC, MASS.

The Yarn Market

Philadelphia, Pa.—Although there were a great many inquiries during the week for yarns to be delivered after the first of the year, the amount of business put through the yarn market was not large, as users of yarn were not willing to pay the present high prices except where they were in pressing need of the yarn. Receipts of yarn from the South were not as large as usual. The opinion was rather freely expressed in the market that the prices on carded and combed single yarn have about reached top levels and that it is only a question of a short time before they go to lower levels. It is admitted however, that two-ply combed yarns are in a much stronger position and that they will remain high even if prices on the other yarns decline.

There were numerous inquiries for carded yarn on cones, in lots of from 10,000 to 100,000 pounds, for both future and prompt delivery and sales were made of from a single case to 150,000 pounds. Buyers were very backward about paying the high prices, and only took yarns where they actually needed them. Spinners are so well sold that they can quote fancy prices and get them. Many of the mills can make no more deliveries this year and for several months into the coming year. Some of the sales reported during the week were 28s Southern frame spun cones, spot delivery 37 cents; 30s cones, 35 to 37 cents; 40s, 45 to 46 cents; 14s, 29 1-2 cents; 24s, 32 1-2 cents.

Most of the weavers who buy yarns in the Philadelphia market are fairly well covered on their present needs and are not buying in anticipation of what they may need in the future. Consequently the demand for weaving yarns was rather slow, though there were sales of 40,000 to 50,000 pounds of buyers outside of the local market. Prices did not advance and while in most cases they held steady, some sales were made at 1 to 2 cents below market quotations.

Fine combed yarns continued high and firm, with no indication of lower prices. The demand for coarse numbers of single combed yarns was slow, as buyers claim that they cannot get a price for their goods which will allow them a profit over the price they have to pay for yarns. The demand for combed yarns for automobile tires was good and spinners who were able to make the deliveries wanted got some orders. Sales of 10,000 to 25,000 pounds were made on the basis of 36 cents for Southern yarns, for future delivery.

Yarn Quotations.

Cotton yarns were quoted in New York on Monday as follows:

Southern Two-Ply Skeins.

4s to 8s	25 1-2
10s to 12s	26 1-2-27
14s	27 1-2

Southern Single Skeins.

4s to 8s	26
10s	26
12s	27
14s	27 1-2
16s	28
20s	29 1-2-30
22s	30
26s	30
28s	31
30s	33 1-2

Southern Single Chain Warps.

10s to 12s	26
14s	27 1-2
16s	28 1-2
20s	30 1-2
22s	30
24s	31
26s	31 1-2
30s	34

Southern Two-Ply Chain Warps, Etc.

8s to 10s	25 1-2
12s to 14s	27
2-ply 16s	28
2-ply 20s	31
2-ply 24s	32 1-2-33
2-ply 26s	34
2-ply 30s	36 1-2-37
2-ply 40s	50
2-ply 50s	59
2-ply 60s	68

Southern Frame Cones.

8s	26 1-2
10s	27
12s	27 1-2
14s	28
16s	28 1-2
18s	29
20s	30
22s	31
24s	31
26s	31 1-2
28s colors	32
30s	34
40s	50

Eastern Carded Cops.

10s	28 1-2
11s	29
12s	29 1-2
14s	30
16s	30 1-2
18s	31
20s	32 1-2
22s	33 1-2
26s	34 1-2
28s	35 1-2
30s	38
40s	51

The Doctor Knew.

"My doctor told me I would have to quit eating so much meat."
 "Did you laugh at him?"
 "I did at first, but when he sent in his bill I found that he was right."—Ex.

The Hull Investment & Securities Company

Trust Building, Charlotte, N. C.

STOCKS AND BONDS

Dealers in Mill Stocks and Bonds and High-Grade Southern Securities

A. M. Law & Co.

Spartanburg, S. C.

BROKERS

Dealers in Mill Stocks and other Southern Securities

Southern Cotton Mill Stocks.

	Bid	Asked
Abbeville C. M., S. C.	102	106
Aiken Mfg. Co., S. C.	...	...
American Spin. Co. S. C.	165	...
Anderson C. M., S. C.	12	20
Aragon Mills, S. C.	60	...
Arcadia Mills, S. C.	100	...
Arkwright Mills, S. C.	110	...
Augusta Factory, Ga.	...	25
Avondale Mills, Ala.	110	120
Belton C. M., S. C.	95	110
Brandon Mills, S. C.	55	60
Brogan Mills, S. C.	...	...
Cabarrus C. M., N. C.	...	...
Calhoun Mills, S. C.	70	...
Cannon Mfg. Co., N. C.	...	...
Capital C. M., S. C.	...	...
Chiquola Mills, S. C.	110	...
Clifton Mfg. Co., S. C.	98	102
Clifton Mfg. Co., pfd.	...	...
Clifton C. M., S. C.	...	...
Courtenay Mfg. Co.	30	...
Columbus Mfg. Co., Ga.	100	...
Cox Mfg. Co., S. C.	...	...
D. E. Converse Co., S. C.	75	80
Dallas Mfg. Co., Ala.	...	...
Darlington M. Co., S. C.	60	80
Drayton Mills, S. C.	10	...
Duncan Mills, S. C.	...	25
Eagle & Phenix M. Co.	...	...
Easley C. M., S. C.	185	...
Enoree Mfg. Co., S. C.	...	...
Enoree Mfg. Co., pfd.	...	...
Enterprise Mfg. Co., Ga.	...	...
Exposition C. M., Ga.	...	...
Fairfield C. M., S. C.	...	...
Gaffney Mfg. Co., S. C.	65	70
Gainesville C. M., com	60	...
Glenwood Mills, S. C.	90	100
Glenn-Lowry Mfg. Co.	...	100
Glenn-Lowry Co., pfd.	...	75
Gluck Mills, S. C.	90	...
Granby C. M., S. C.	...	...
Graniteville Mfg. Co.	15	...
Greenwood C. M., S. C.	60	90
Grendel Mills, S. C.	100	110
Hamrick Mills, S. C.	120	...
Hartsville C. M., S. C.	175	250
Henrietta Mills, N. C.	...	...
Inman Mills, S. C.	102	...
Inman Mills, S. C., pfd.	100	...
Jackson Mills, S. C.	102	...
Judson Mills, S. C.	70	72
King, Jno. P. Mfg. Co.	...	85
Lancaster C. M., S. C.	150	...
Lancaster C. M., pfd.	...	96
Langley Mfg. Co., S. C.	...	...
Laurens C. M., S. C.	105	115
Limestone C. M., S. C.	125	...
Lockhart Mills, S. C.	50	60
Loray Mills, N. C., com	...	...
Loray Mills, 1st pfd.	...	90
Marion Mfg. Co., N. C.	108	...
Marlboro Mills, S. C.	...	80
Mills Mfg. Co., S. C.	100	110

Mollohon Mfg. Co. S. C.	80	100
Monarch C. M., S. C.	120	...
Monaghan Mills, S. C.	...	...
Newberry C. M., S. C.	110	120
Orr C. M., S. C.	80	...
Ottaray Mills, S. C.	...	...
Pacolet Mfg. Co., S. C.	...	102
Pacolet Mfg. Co., pfd.	95	...
Pelzer Mfg. Co., S. C.	95	...
Pickens C. M., S. C.	95	100
Piedmont Mfg. Co., S. C.	145	...
Poe, F. W. Mfg. Co.	103	...
Parker Mills Co., pfd.	11	12.50
Saxon Mills, S. C.	106	...
Sibley Mfg. Co., Ga.	...	...
Spartan Mills, S. C.	112	120
Toxaway Mills, S. C.	...	...
Tucapau Mills, S. C.	250	...
Union-Buffalo 1st pfd.	49	55
Union-Buffalo 2d pfd.	5	10
Victor-Monaghan pfd.	...	...
Ware Shoals Mfg. Co.	90	100
Whitney Mfg. Co.	100	125
Williamston Mills	87.50	95
Woodruff C. M., S. C.	103	...
Woodside C. M., pfd.	...	60
Woodside, C. M., com.	28	...

Effective Mill Ventilation.

(Continued from Page 6.)

to illustrate the practicability of this method of ventilation.

I have not attempted to deal with the question of humidifying the air, as that requirement is not always necessary in mills, and if moisture in the air is needed, special apparatus is required.

The reason for presenting this paper is to call attention to the fact that many rooms in offices, mills and factories may be ventilated without a great outlay for apparatus and without cost for operating and upkeep. Rooms without lift windows or with the radiating surface located elsewhere than under the windows present certain difficulties in the application of this method of ventilation, but there are, nevertheless, many kinds of rooms where it can be used.

I have not thought it advisable to discuss the need of fresh air in workrooms, as I believe everyone knows that more and more and better work can be done if operatives are constantly receiving fresh air without draughts or discomfort. Many experiments are being made in attempts to determine the proper temperature relative humidity and constituents of the air that produce the most healthy atmosphere for human beings while indoors, but so far no definite conclusions of value have been reached. Many negative but few positive statements are being made by the experimenters.

Personally, I am convinced that liberal quantities of fresh air should be introduced into workrooms. All of the air in the rooms should circulate slowly and the outward current should carry with it the vitiated mixture caused by the occupancy of the room by human beings.

PERSONAL ITEMS.

S. A. Crutchfield of the Pilot Mills, Raleigh, N. C., is now overseer of carding and spinning at the Neuse Mfg. Co., Neuse, N. C.

F. D. Williams, of Sylacauga, Ala., has accepted the position of overseer of carding and spinning at the Great Falls Mfg. Co., Rockingham, N. C.

L. W. Peck, superintendent of the Georgia Mills, Griffin, Ga., will be married next month to Miss Ethel Williams of Griffith, Ga., the engagement having been announced last week.

H. F. Elliott has been promoted from second hand to overseer of carding at the Brown Mfg. Co., Concord, N. C.

A. C. Cashion of Mayworth, N. C., is overhauling spinning at the Jewell Cotton Mills, Thomasville, N. C.

F. M. Church has been promoted from loom fixer to second hand at the E. A. Smith Mfg. Co., Rhodhiss, N. C.

G. H. Waldrop has returned to his former position as second hand in spinning at the Pacolet Mfg. Co., New Holland, Ga.

M. G. Hinson of Union Bleachery & Finishing Co., Greenville, S. C., has become master mechanic at the Saco-Gotho Mills, Lexington, N. C.

W. H. Cox has resigned his position at Rockwell, N. C., to become superintendent of the Alpine Mill No. 1, Morganton, N. C.

S. C. Whitaker has resigned as loom fixer at the Erwin Mill No. 4, West Durham, N. C., to become overseer of weaving at the Hamburger Mills, Columbus, Ga.

— — — Smithy has resigned as overseer of carding at the Pickett Mills, High Point, N. C., to become night superintendent of the Armstrong Mill, Gastonia, N. C.

S. O. Howell has resigned as overseer of carding at the Highland Mills, High Point, N. C., to accept a similar position with the Pickett Mills, of that place.

S. E. Ellis has resigned as overseer of carding at the Little River Mills, Rougemont, N. C., to accept a position with the Golden Belt Mfg. Co., of Durham, N. C.

Will Dawkins has resigned as loom fixer at the Jackson Mills, Monroe, N. C., to return to his former position as loom fixer at the Manetta Mills, Lenoir, S. C.

H. F. Forsyth of the Seminole Mfg. Co., Clearwater, S. C., has accepted position as overseer of weaving at the Aiken Mfg. Co., Bath, S. C.

W. C. Colwell has resigned as master mechanic at the Park Woolen Mills, Rossville, Ga., to accept a similar position at the Thatcher Spinning Co., Chattanooga, Tenn.

J. M. Lingerfelt has resigned as second hand in carding at the E. A. Smith Mfg. Co., Rhodhiss, N. C., to accept a position at the Falls Mfg. Co., Granite Falls, N. C.

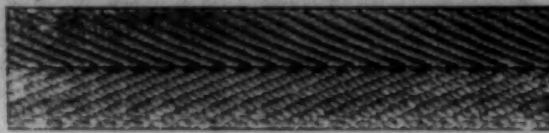
J. R. Peoples has resigned as second hand in spinning at the Pilot Mill, Raleigh, N. C., and accepted a similar position at the Rosemary (N. C.) Mill No. 3.

W. B. Chance has resigned as overseer of carding at the Brown Mill, Concord, N. C., to become superintendent of the Harden Mfg. Co., Worth, N. C.

J. W. Elliott has resigned as second hand in speeder room at the Amazon Mills, Thomasville, N. C., to accept a position at Grand Rapids, Mich.

AMERICAN TEXTILE BANDING CO. Inc

Manufacturers of
Spindle Tape
And
Bandings



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PHILADELPHIA, PA.

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Our tapes are endorsed by machinery experts

They know their quality and they know their scientific structure. Exhaustive trials by practically all machinery makers have demonstrated that they have no superior. Write us.

BARBER MANUFACT'NG CO., Lowell, Mass.
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What shuttle you put
into the looms has a great
deal to do in determining

the percentage
of production
and quality of
cloth that comes
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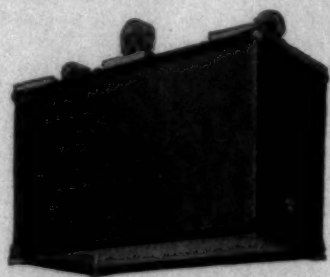
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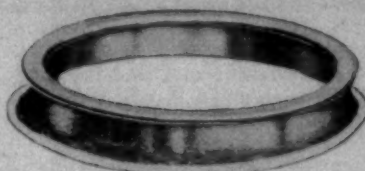
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Remember

When changing to a larger or smaller size Ring, that we can SAVE YOU the EXPENSE of buying new holders by FURNISHING YOU a RING with the BASE EXPANDED or CONTRACTED to FIT YOUR PRESENT HOLDERS.



SOUTHERN SPINDLE & FLYER CO., Inc., Charlotte, N. C.

W. H. Monty, Pres. & Treas.

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Reg. U. S. Pat. Off.

Arabol Gum G.



Reg. U. S. Pat. Off.

- A. Attracts Moisture and Softens the Yarn.
- R. Retains the Moisture, Making the Yarn More Pliable.
- A. Adds Strength and Elasticity.
- B. Boils Thin; Thereby Penetrating the Yarn.
- O. Opens the Yarn. Preventing Break-Backs.
- L. Lays the Fibre.

TRIAL ORDERS SHIPPED ON APPROVAL — ESPECIALLY VALUABLE IN HOT DRY WEATHER.

ARABOL MANUFACTURING COMPANY

100 William Street, New York

CAMERON MacRAE, Southern Sales Agent CHARLOTTE, N. C.

J. H. Ormer has resigned as second hand in carding at the Canebrake Mills, Uniontown, Ala., to accept a position with E. N. Jordan Overhauling Co., Atlanta, Ga.

J. S. Bridges, overseer of weaving at the Florence Mill, Forest City, N. C., was stricken with paralysis last week and is in a serious condition.

E. R. Holder has resigned as second hand in night carding at the Lenoir (N. C.) Cotton Mills, to become second hand in twister room at the Climax Mills, Belmont, N. C.

Walter Herring has resigned as second hand in spinning at the Hamburger Mills, Columbus, Ga., to become overseer of spinning at the Quitman (Ga.) Mfg. Co.

G. H. Graham has resigned as second hand in spinning at the Pacolet Mfg. Co., New Holland, Ga., to take an interest in a medicine concern at that place.

B. J. Dobbins Married.

B. J. Dobbins, superintendent of the Highland Park Mill No. 3, Charlotte, N. C., was married last Saturday night to Miss Emily Buckeaster, of Spartanburg, S. C.

Miss Buice Entertains.

Miss Ada Buice entertained at the home of her parents, J. D. Buice, superintendent of Chadwick-Hoskins Mill No. 5, Pineville, N. C., last Friday evening on Dover street, the occasion celebrating her sixteenth birthday. The pretty home was beautifully decorated with flowers, the color scheme of which was pink and white. On a lovely centerpiece in the dining room was the birthday cake, with 16 pink and white candles and pink and white ribbon was festooned from the electroliter to the corners of the table. Cream and cake was served and nearby was a smaller table on which were massed pink roses and a large bowl of delicious punch.

Want Department

Want Advertisements.

If you are needing men for any or have second hand machinery, etc., to sell the want columns of the Southern Textile Bulletin afford the best medium for advertising the fact.

Advertisements placed with us reach all the mill and show results.

Employment Bureau.

The fee for joining our employment bureau for three months is \$2.00 which will also cover the cost of carrying a small advertisement for one month.

If the applicant is a subscriber to the Southern Textile Bulletin and his subscription is paid up to the date of his joining the employment bureau the above fee is only \$1.00.

During the three months' membership we send the applicant notices of all vacancies in the position which he desires.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern textile industry.

Operatives Wanted.

Wanted for mills now starting at Tarboro, N. C., families containing spinners, spoolers, winders and doffers, also a few slubber and speeder hands. Plenty of good houses, free graded schools, churches of all denominations. Letters from above named help will receive prompt attention. Write to either John L. Davidson or A. M. Vandergrift, Tarboro, N. C.

Card Grinder Wanted.

Wanted a card grinder for 28 Mason cards, 2 sets of Kitson's pickers, 6 drawing frames. Must be a experienced grinder. State how soon you can come. Prendergast Cotton Mills, Prendergast, Tenn. J. H. Garrett, carder, B. W. Bingham, Supt.

Spinners Wanted.

Wanted—2 or 3 families of spinning room help. Good wages, cheap place to live, good schools. All white stock. Day work. Jno. Gregson, Supt., Elizabeth City Cotton Mills, Elizabeth City, N. C.

Picker and Card Hands Wanted.

Picker and card tenders wanted. \$11.50 and \$12.00 weekly five night. Transportation furnished to reliable parties. Apply to John A. Perkins, Supt., Utica, N. Y.

Weavers and Loom Fixers.

Wanted weavers and loom fixers. Send references. F. L. Brannen, Postex Cotton Mills, Post, Texas.

MACHINIST WANTED.

WANT MACHINIST AND ENGINEER FOR NIGHT WORK. ADDRESS MILLEN COTTON MILLS, MILLEN GA.

Help Wanted.

Wanted—10 good families of mill help for day and night work. Apply to H. C. Moore, R. F. D. 2, Rockingham, N. C. Transportation furnished good families.

Financial Assistance Desired.

Would like to correspond with party or parties that would join me in the purchasing and operating of a small cotton mill. Good opportunity for some one with capital. Address "Capital," care Southern Textile Bulletin.

Frame Hands and Spinners.

I can use one or two frame hands, two or three good families of spinners and spoolers and a good twister hand or two. Write me. P. M. Sinclair, Aragon, Ga

WANT position as overseer spinning. Now employed, but can change on short notice. Have been overseer spinning for 10 years and can give satisfaction. Good references. Address No. 1595.

WANT position as superintendent of yarn or weave mill of 12,000 to 25,000 spindles, or assistant superintendent of larger mill. Can offer first-class references. Address No. 1596.

WANT position as superintendent, would prefer yarn mill. Now employed and giving satisfaction, but want larger mill. Address No. 1597.

WANT position as manager or superintendent. Would take stock in right mill. Have had long experience and can furnish best of references. Address No. 1599.

WANT position as superintendent of any size yarn or weave mill on sheetings, prints or drills. Have been in the mill for 30 years and am fully competent. Have 16 years experience as carder and spinner. Prefer a place in Ga., Ala., Miss. or Tenn. Have clean record as to character and ability. References. Address No. 1600.

WANT position as overseer of carding. Am at present employed as erector for one of the large machinery companies. Am an experienced carder and can give satisfaction. Can furnish excellent references as to character and ability. Address No. 1601.

WANT position as superintendent. Would prefer yarn mill, but experienced in both yarn and weaving mills. Am now employed and can furnish best of references. Address No. 1602.

WANT position as overseer of carding at not less than \$3.00. Am now employed but prefer to change. Long practical experience and good references. Address No. 1603.

WANT position as superintendent of yarn mill or as carder and spinner. Have had long experience in both departments and can give satisfaction. Address No. 1604.

WANT position as overseer of spinning. Have had 21 years experience in spinning with six years as carder. Best of references. Address No. 1605.

WANT position as superintendent of either yarn or plain weave mill or as carder and spinner. Am now employed and giving satisfaction and have had long experience both in carding and spinning. Can furnish best of references. Address No. 1606.

WANT position as overseer of spinning. Am now employed at night but wish to change to day run. Long experience and best of references. Address No. 1607.

WANT position as overseer of carding or carding and spinning. Am filling present position satisfactorily, but for good reasons prefer to change. Can furnish good references. Address No. 1608.

WANT position as overseer of spinning. Am now filling position as carder and spinner on night run but prefer to change to day run. Best references. Address No. 1609.

WANT position as overseer of dyeing or finishing. Have had long experience in both positions and as overseer of cloth room. References are first class. Address No. 1610.

WANT position as overseer of carding large mill or superintendent of yarn mill. Want mill that will appreciate services of a competent man who is sober, industrious, reliable and with ambition to do. Can come on short notice. Present employers as references. Address 1611.

WANT position as superintendent or assistant superintendent of either weave or yarn mill. Am especially strong in carding and spinning and can furnish references from former employers. Address No. 1612.

WANT position as superintendent or overseer of carding. Am now employed but prefer to change. Best of references. Address No. 1613.

WANT position as superintendent. Have had long experience and always give satisfaction. Reason for changing better salary. Age

45, married, strictly sober. Experienced from ground up on both white and colored work. Address No. 1614.

WANT position as superintendent or as overseer of large card room. 22 years experience in mill and 15 years as overseer of carding and spinning. Graduate of course in cotton carding and spinning. At present employed. Address No. 1615.

WANT position as superintendent. Am an educated man who has had several years experience as superintendent and can furnish best of references from last employers. Address No. 1616.

WANT position as chief engineer or master mechanic. Have a successful record of 13 years experience. Age 35, sober, good habits and can furnish good references. Am now employed but prefer to change. Address No. 1617.

WANT position as superintendent. Have had 20 years experience as superintendent and can furnish first class references from former employees and am now employed. Address No. 1618.

WANT position as superintendent or overseer of spinning. Am now employed but desire to change. Can furnish first-class references from former employers. Address No. 1619.

WANT position as overseer of carding. Four years experience as overseer on both white and colored work. Can furnish first-class references. Address No. 1620.

WANT position as master mechanic or foreman machinist. Have had long experience in mill work and can handle either steam or electric plant. Good references. Address No. 1621.

WANT position as superintendent of 10,000 to 20,000 spindle mill. Age 40. Have 30 years experience on wide variety of white and colored goods. Good references. Address No. 1622.

WANT position as overseer of weaving. Experienced on both white and colored work and can furnish first class references. Address No. 1623.

WANT position as superintendent or overseer of spinning. Am a practical man, 40 years old, married, strictly sober. Experienced from picker room to cloth room on white and colored goods. Good references as to character and ability. Address No. 1624.

WANT position as overseer of spinning or carding and spinning. Now employed as night superintendent, but wish to change to day run. Fine references. Address No. 1626.

WANT position as superintendent. Have had long practical experience and am competent to handle any size and kind of mill. Address No. 1627.

WANT position as overseer of spinning and twisting at not less than \$3.00 per day. Would take a large twister room. Long experience. Good references. Address No. 1628.

WANT position as superintendent of yarn mill of 10,000 to 30,000 spindles. 22 years mill experience and have been superintendent for past 12 years. Married and have good habits. Age 45. Now employed and have been on present job for 9 years. Good references. Address No. 1629.

WANT position as overseer of weaving. Have been steadily employed for 19 years and have always given satisfaction. Can give my present superintendent as reference, as am only changing for larger position. Address No. 1630.

WANT position as superintendent. Have had long experience with special experience on fine combed yarn. Can furnish best of references. Address No. 1631.

WANT position as superintendent. Am now employed as overseer of carding in one of the largest mills in the South, and am entirely competent to fill position as superintendent. Best of references. Address No. 1632.

WANT position as carder or carder and spinner. Am now engaged as carder in first-class mill, but have reason for wanting to change. Am married and sober. Have I. C. S. education and eleven years practical experiences and can deliver the goods. Address No. 1633.

WANT position as superintendent or overseer of weaving. Have handled one of the largest colored goods rooms in the South for 6 years and gave up the position on my own accord. Can furnish best of references. Address No. 1634.

WANT position as carder or carder and spinner. Am now employed but prefer larger mill. Have had long experience and can give first-class references. Address No. 1635.

WANT position as overseer of weaving. Have had long experience including cotton duck.

Now employed and can furnish best of references. Address No. 1636.

WANT position as overseer of weaving. Am experienced on colored goods weaving and designing. Can furnish best of references. Address No. 1637.

WANT position as overseer of overseer of weaving. Am now employed and have long experience on both plain and Draper looms. Can furnish excellent references. Address No. 1638.

WANT position as engineer or master mechanic. Age 45. Have had 20 years experience with steam, water and electric drives. Good references. Address No. 1639.

WANT position as superintendent. Am now employed and giving entire satisfaction but wish to change to healthy location. Best of references from former employers. Address No. 1640.

WANT position as superintendent or overseer of weaving. Have had long experience both as superintendent of yarn and weaving mills. Good manager of help and can furnish best of references. Address No. 1641.

WANT position as superintendent of yarn mill or as overseer of carding. Long experience on all classes of yarns from 4's to 180's. Special experience on combed yarns. Address No. 1642.

WANT position as superintendent or overseer of spinning. Am now employed as overseer in large mill and can furnish references that will be satisfactory. Address No. 1643.

WANT position as superintendent or overseer of spinning and carding. Thoroughly practical. Married, strictly temperate. 18 years as overseer, 16 years as superintendent. Address No. 1644.

WANT position as superintendent. Have had long experience and am now employed but wish to change. Best of references. Address No. 1645.

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WANT position as superintendent, overseer of weaving or overseer of cloth room. Am a capable man for either place and can give former employers as references. Address No. 1646.

WANT position as overseer of weaving in mill making duck, drills, sheetings or drills and sateens. Have had long experience on this class of goods and can furnish good references as to habits and ability. Address No. 1647.

WANT position as superintendent or assistant superintendent of yarn or cloth mill, while on colored, coarse or medium numbers. Can give good references. Will accept job at \$4.00 per day or more. Address No. 1648.

WANT position as superintendent. Have been superintendent for large mills and am now employed. Can furnish best of references. Address No. 1649.

WANT position as overseer of spinning and twisting or will take second hand in spinning room. Am capable man and can get results. Good references. Address No. 1650.

WANT position as overseer of carding or would take place as carder and spinner. Long experience on both white and colored goods. Am at present employed in one of the largest mills in the South and giving satisfaction. Would prefer mill in N. C. 30 years old, married, temperate and can come on short notice. Excellent references. Address No. 1651.

WANT position as overseer of spinning. Have had 15 years experience as spinner. Held present

position 4 years and have good reasons for wishing to change. Am a good manager of help. Married, and have family. Can come on short notice. Good references. Address No. 1652.

WANT position as superintendent of medium size mill or carder and spinner in large mill. Now employed and can furnish best of references. Address No. 1653.

WANT position as overseer of large cloth room or small cloth room and weave room combined. Have had 20 years experience in these two departments. Now employed but want larger job. Can furnish excellent references as to character and ability. Address No. 1654.

WANT position as superintendent or manager of a 5,000 to 20,000 spindle mill. Am anxious to locate in the Piedmont section of the Carolinas or Georgia. Can come on short notice. Have had long experience as superintendent and manager and can give satisfaction. Address No. 1655.

WANT position as superintendent. Have held similar position for a number of years and am a practical man. Can give satisfactory references. Address No. 1656.

WANT position as overseer of carding. Now employed as overseer of and have held present position for 5 years. Am a young man looking for a larger room. 27 years old, sober as a judge and can handle a card room satisfactorily and would like to correspond with mills needing a good man. Good references. Address No. 1657.

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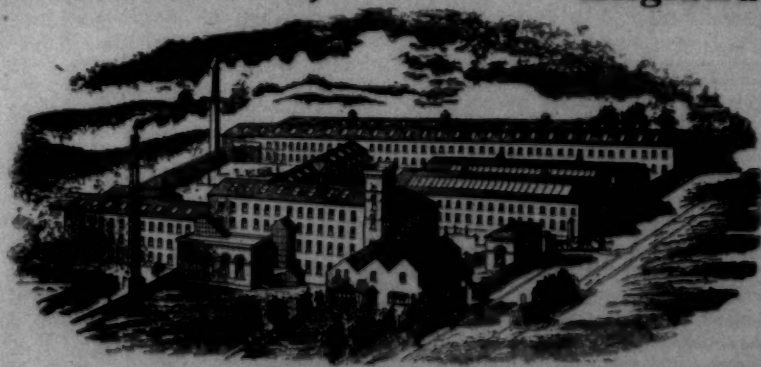
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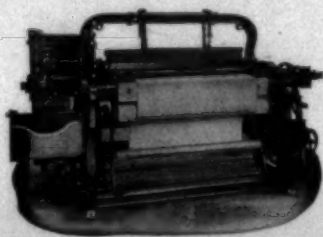
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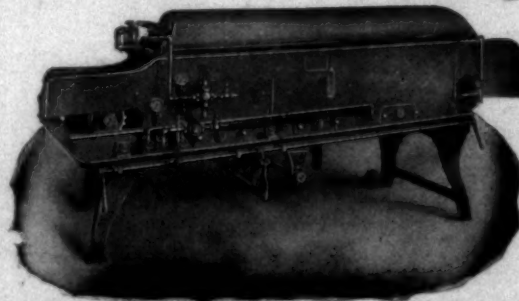
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